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draft
September 1989

CUNARD
NEW RIVER GORGE NATIONAL RIVER • WEST VIRGINIA

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

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INTRODUCTION

This development concept plan/environmental assessment represents another step in the ongoing planning, management, and development process that is making the New River Gorge National River a reality. The planning process began with the preparation of the park's *General Management Plan* (GMP) in 1982, which provided a parkwide overview of park resource management strategies and visitor activities. In 1988 the *Park Management and Development Guidelines* was prepared. That document updates the direction established by the GMP, sets the stage for more detailed planning, and establishes the philosophical framework for site-specific decision making. Among the things spelled out in the guidelines are statements of park purpose, park significance, and park management objectives listed below:

The purposes identified for the national river will be to

> conserve and interpret outstanding natural, scenic, and historic values and objects in and around New River Gorge
>
> allow resource-based recreation that does not impair resource values

Also in that document the following statements summarize the significance of resources at the national river:

> Size and topographic relief make the gorge an outstanding scenic resource in West Virginia.
>
> New River Gorge provides some of the best white-water boating in the eastern United States.
>
> New River is the best warm-water stream fishery in the state.
>
> New River is believed to be the oldest river on the North American continent, and it illustrates "rejuvenated stream" processes.
>
> The river corridor has resulted in unusual plant and animal diversity.
>
> New River Gorge contains remains of the mining and transportation of "smokeless" coal, which played a major role in America's industrial history.

After identifying the purpose and significance of the resources, the following series of management objectives - which represent goals that park management will work toward - were formulated for New River Gorge National River:

> Protect and maintain the natural diversity of plants and animals.
>
> Sustain the warm-water fishery while protecting natural diversity.
>
> Preserve outstanding scenic views in and around the gorge--preserve the predominant natural setting in the gorge from I-64 north and the rural pastoral scenery south of I-64.

Encourage visitors to use related interpretive and recreational sites outside the park boundary.

Preserve coal mining, railroading, and other historic resources that best illustrate park significance.

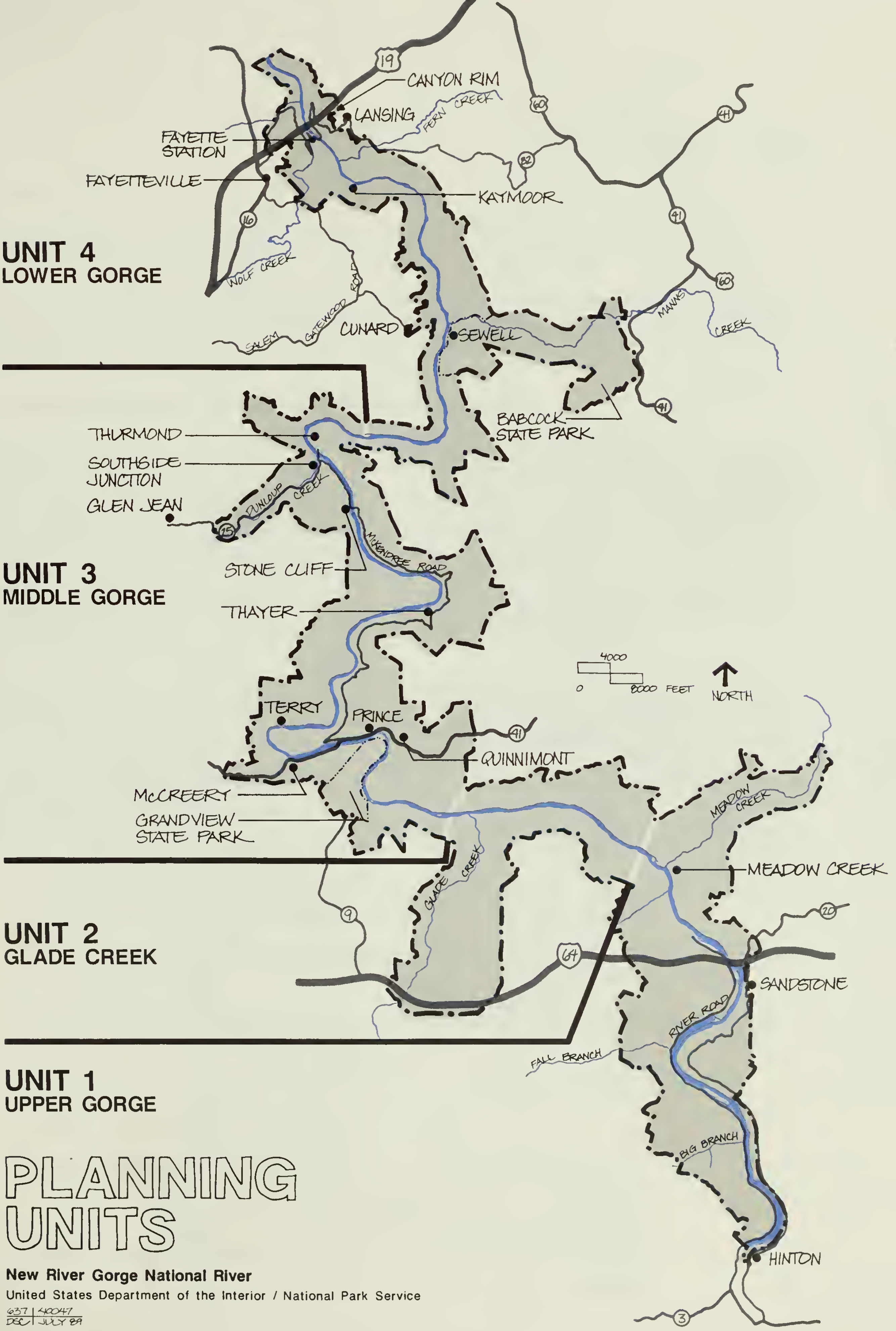
In cooperation with others, achieve and maintain water quality to meet state standards that allow for primary human contact.

Develop a system of land- and water-based recreational opportunities that allow visitors to experience the park's resources to the extent that natural, cultural, and scenic values are not impaired.

Work with local towns and communities associated with New River to help perpetuate their character and vitality.

Work with the community to the extent possible to help them maximize economic benefits related to park development without impairing the natural and cultural resources.

For purposes of the current planning efforts at New River Gorge National River, the park has been divided into planning units. A planning unit is a section of the park that has both physical and visitor use characteristics that differentiate it from other sections of the park. At New River Gorge National River there are four such geographic areas that have been designated as planning units. Moving from south to north (following the flow of the river) those units are: Unit 1 - Upper Gorge, Unit 2 - Glade Creek, Unit 3 - Middle Gorge, and Unit 4 - Lower Gorge (see Planning Units and Location maps). The emphasis and significance of each unit is explained in the appendix.



PLANNING UNITS

New River Gorge National River

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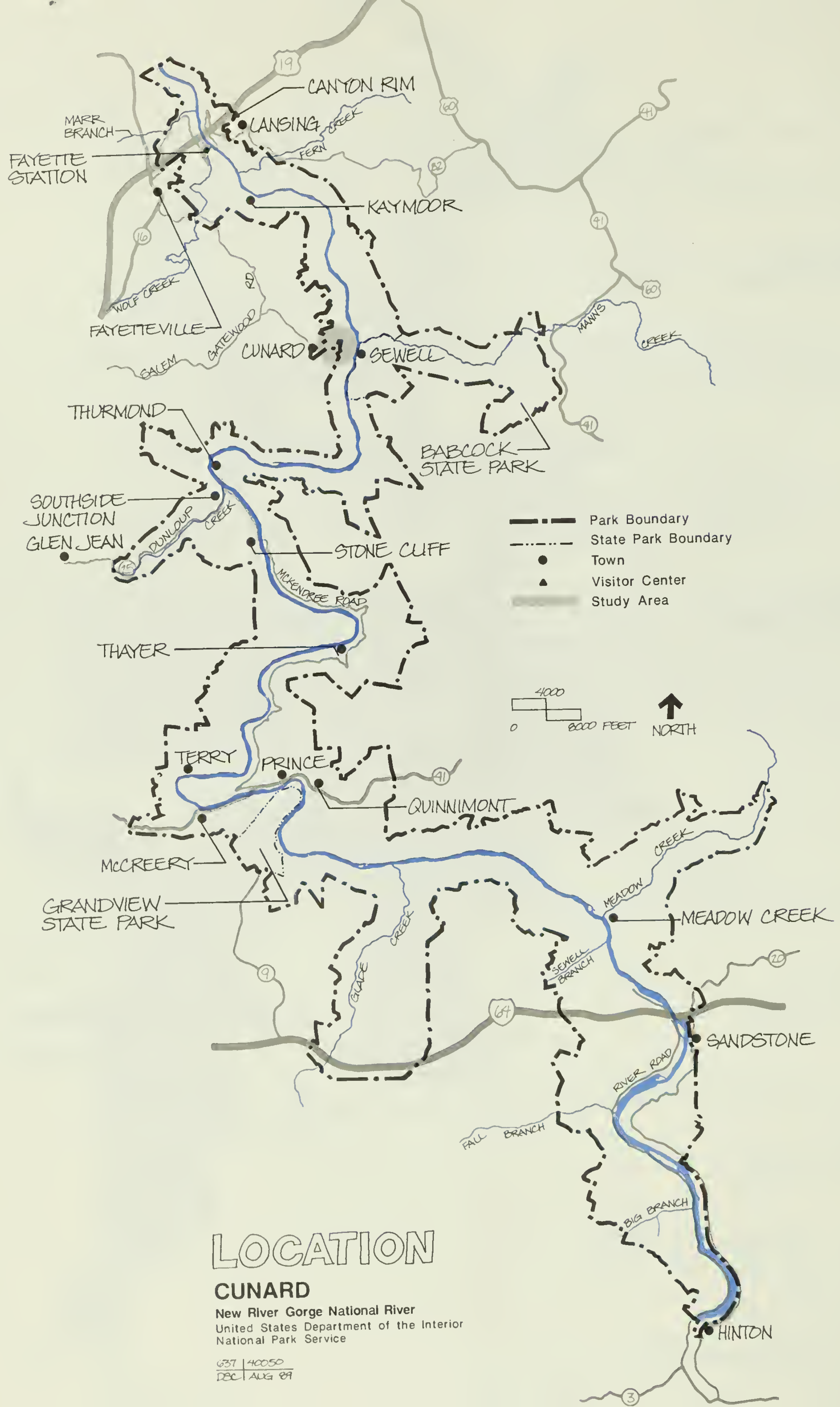

LOCATION

CUNARD

New River Gorge National River
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STUDY AREA

INTRODUCTION

The general area being considered in this DCP is the Lower Gorge planning unit, which is on the west bank of the New River. This unit is the deepest section of the park.

The specific study area is the Cunard site, which is in the steep-sided northern end of the unit. The area includes the gravel access road from the town of Cunard to the boat landing sites along the west bank of the New River, from Coal Run south for approximately .5 mile.

PLANNING OBJECTIVES FOR THE LOWER GORGE UNIT

Lower River Gorge is characterized by steep slopes and sheer drop-offs from the escarpment that runs along the rim. The narrow river corridor drops significantly in elevation over a short distance, creating many rapids. No active settlements remain in this unit of the park, although the unit does contain remains of important historic sites at Sewell, Kaymoor, and Nuttallburg. The natural environment has all but reclaimed most of the land within the unit so river runners are the predominant users in this portion of the gorge. Local fishermen and hunters continue to use this area much as they did before the park was established. The rock outcrops along the rim provide dramatic scenic-viewing opportunities for more passive visitors and rockclimbing challenges for the more adventurous visitor. Road access to the river is limited to each end of the unit and at Cunard.

This unit is one of dramatic contrasts in both landscape and visitor experience. On the rim, the emphasis will be to introduce travellers to the New River Gorge. At the other extreme - 1,000 feet below on the river - park users raft or kayak the challenging class V rapids. As a middle ground, opportunities will be offered for relaxed picnicking, taking short hikes on loop trails, attending environmental education programs, or participating in more challenging activities such as rock climbing along the "Endless Wall." Most land-based development and destination activity will be at sites on or near the rim, and the river shoreline will be managed as a more primitive area with fewer modern conveniences. Planning objectives for visitor use, development, and interpretation will be to

> provide park information/orientation at Babcock State Park and at Glen Jean as a supplement to the major information/orientation facility at Canyon Rim
>
> provide places to view the New River Gorge--particularly geologic features such as rock outcrops, the river corridor, river rapids and rafting, and historic features
>
> create hiking opportunities within this unit to satisfy a variety of interests and abilities among park users
>
> provide continued access to rockclimbing areas and improved parking for users
>
> establish backcountry campsites along park trails
>
> relieve congestion at river access points
>
> establish interpretation for visitors on the river
>
> establish campsites and discovery trails for river users

PLANNING OBJECTIVES FOR CUNARD

Planning objectives for the specific study area would be to

improve drainage and surface conditions along the entire length of the Cunard access road and to widen for pullouts where possible

reduce vehicle-generated dust at the west (top) end of the access road near the community of Cunard

establish a trailhead parking area for park visitors who wish to hike in this part of the park

provide vehicular access to, or within, 1/2 mile of traditional fishing areas

establish a circulation and parking system at the Cunard river access site that eliminates existing traffic congestion

provide parking space adequate to accommodate 40 commercial vehicles(eg. flatbed trucks with or without trailers, two-ton trucks, and/or 22 passenger school buses) and a minimum of 10 private automobiles

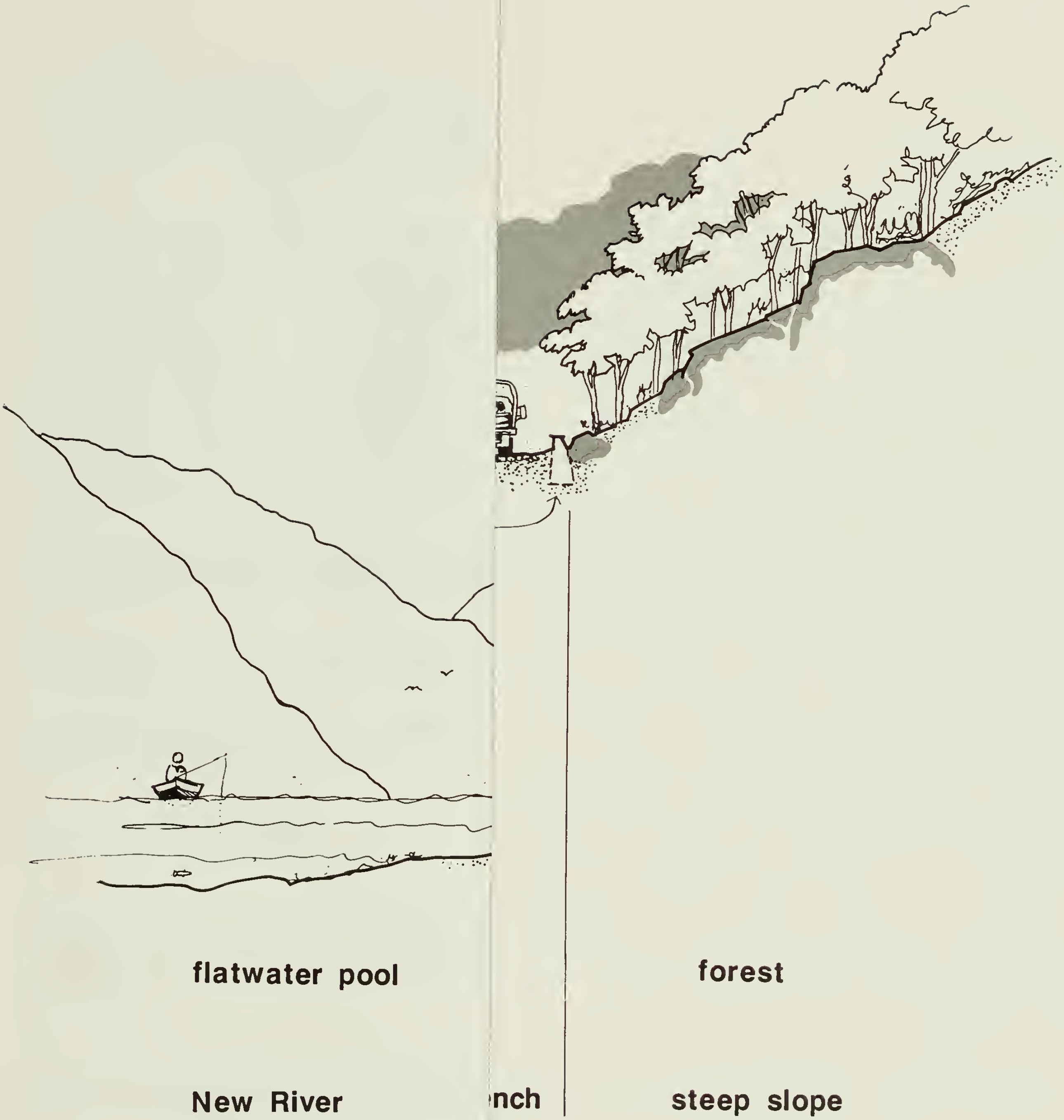
provide toilet facilities near the Cunard river access site during the primary visitor season

interpret the historic significance of the site as the location of the first ferry crossing in the gorge--part of the"Old State Road" that was completed in 1790

allow controlled access to family cemeteries located in the gorge that are accessible only by the abandoned railroad grade south of the Cunard site

provide information to allow visitors to determine what skills, knowledge, and equipment are needed to participate safely and responsibly in fishing and whitewater boating

help perpetuate the character of the community of Cunard



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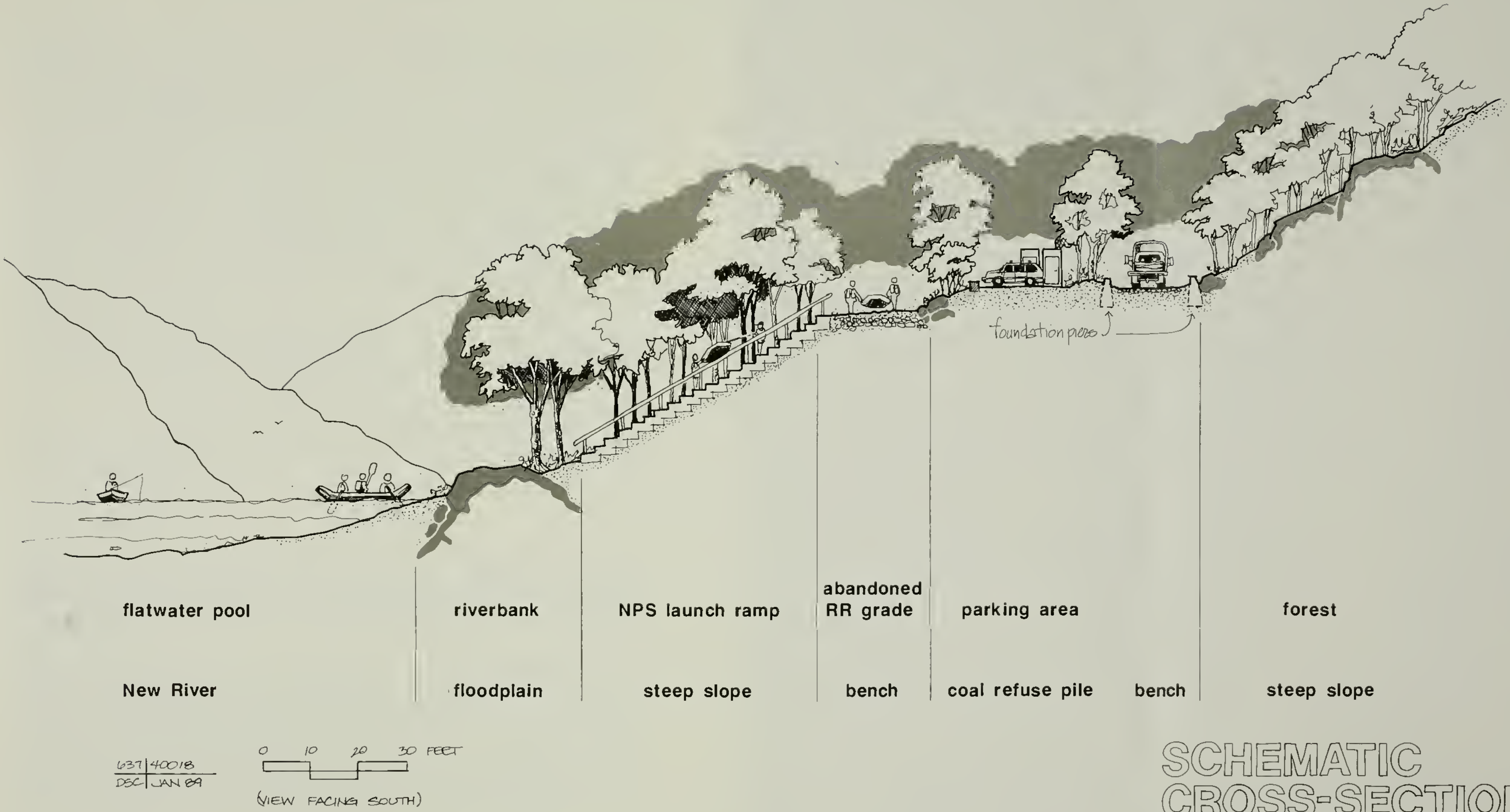
VIEW

SCHEMATIC CROSS-SECTION

CUNARD

New River Gorge National River

United States Department of the Interior / National Park Service



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SCHEMATIC CROSS-SECTION

CUNARD

New River Gorge National River
United States Department of the Interior / National Park Service

DESCRIPTION OF THE ENVIRONMENT

OVERVIEW

The study area includes the Cunard access road, which begins near the terminus of West Virginia Highway 9 in the town of Cunard and winds down off the rim for approximately 1 1/2 miles, terminating above the west bank of the New River and the narrow bench between the river and the steep slopes of the gorge.

At the end of the Cunard road are two former railroad grades that create terraces above the river. The lower terrace or bench runs parallel to the river and crosses Coal Run on a wooden trestle before terminating at the active railroad tracks about 1/2 mile north of the Cunard launch site. The upper and lower terraces intersect a few hundred feet south of the launching area, from where it continues south to Thurmond. A small parking area has been constructed on the upper terrace adjacent to the road, and temporary portable toilets have been installed. A path connecting this level to the lower bench has been established by repeated use and has eroded the steep bank creating a trench. Sliding rafts down the long steep bank from the lower bench level to the river has denuded the slope of vegetation, and erosion is severe in some locations, washing away the top soil and exposing the coal refuse to the elements.

About 1/4 mile north of the existing launching area and south of Coal Run is a flat, 1-acre site adjacent to the river that has excellent potential for a launch site. This site is wooded and covered with large river rocks, deposited by the river during periods of high water.

Class VI, one of the commercial rafting companies, owns property south of the Cunard launch site which they use for a picnic stop or an occasional put-in for their trips.

Cunard was the site of some historical mining operations associated with the railroad. No utilities are available to Cunard.

NATURAL RESOURCES

Vegetation at Cunard is made up of a hardwood forest consisting of silver maple, red maple, American sycamore, paw paw, river birch, elm, box elder, buckeye, beech and paulownia. Some of the shrubs are mountain silverbell, musselwood, and spice bush. Other herbaceous plants in the area are nettles, fleabane, wild ginger, wild rose, phlox, and poison ivy.

The New River is free-flowing for 52 miles within the national river boundary. River levels fluctuate over short periods of time because of water releases from Bluestone Dam; however, the highest monthly river flows are usually in March and lowest in September.

The New River and its tributaries comprise the largest and most significant warm-water stream fishery in the state. Of the 58 species of fish identified in the New River, five are considered to be endemic. These include *Nocomis platyrhynchus* (bigmouth chub), *Notropis scabriceps* (New River shiner), *Phenacobius teretulus* (Kanawha minnow), *Estheostoma kanawhae* (Kanawha darter), and *Etheostoma osburni* (finescale saddled darter).

According to available information from the U.S. Fish and Wildlife Service, no federally listed endangered or threatened plant species occur in the study area, nor is there any critical habitat within the project area.

U.S. Fish and Wildlife Service has identified the area around Cunard as potential bottomland hardwood habitat. This habitat consists of box elder, river birch, silver maple sycamore, and black willow species. These trees and associated herbaceous vegetation are tolerant of wet, moist conditions that are found within wetland and riparian zones.

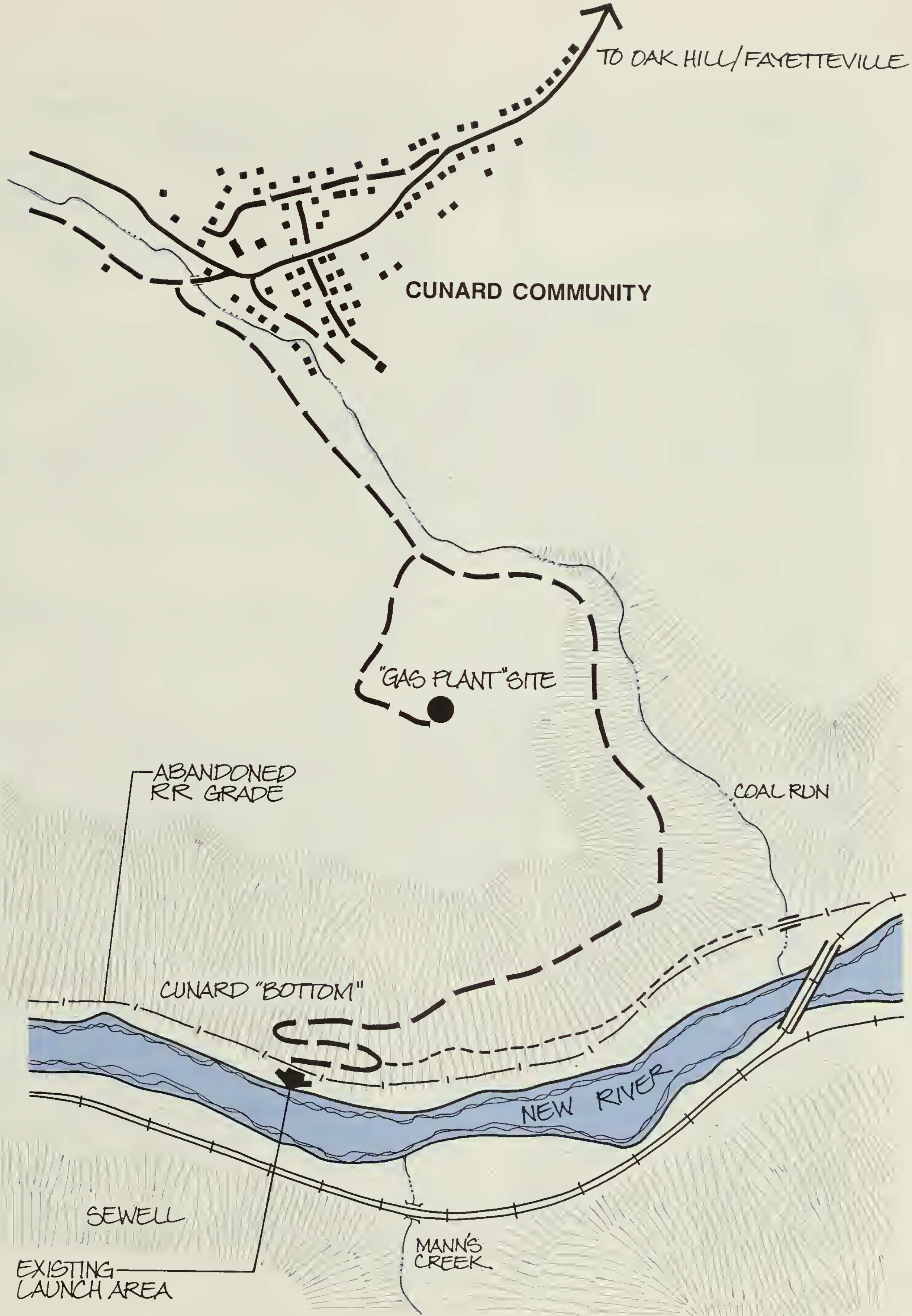
The large flat area at the base of Coal Run has a healthy representation of native West Virginia flora, particularly floodplain flora. In a survey conducted by the State Department of Natural Resources, a healthy population of *Cardamine flagellifera* was found. This species is listed on the West Virginia State Department of Natural Resources rare species list, which is maintained by the state's Natural Heritage Program. Additionally, the black bellied salamander (*Desrimahs Quadrimatriculus*), listed on the West Virginia state rare species list, was discovered in Coal Run.

The U.S. Fish and Wildlife Service lists five endangered/threatened species that are found in New River Gorge: peregrine falcon (*falco peregrinus*), Indiana bat (*Myotis sodalis*), Virginia big eared bat (*Plecotus townsendii Virginianus),* and bald eagle (*Haliaeetus leucocephalus*). Additionally there are three species listed under category 2 that signifies that these species are undergoing a review process by the U.S. Fish and Wildlife Service to determine whether they should be added to the federal list of threatened or endangerd species. They are the Eastern small-footed bat (*Myotis subulatus leibii*), southeastern big eared bat (*plecotus rafinesquei*), and woodrat (*Neotoma floridana magister*). None of these species have been found in the project area.

On August 13, 1986, the U.S. Fish and Wildlife Service classified the New River and its associated aquatic, wetland, and riparian habitat as resource category 1, in accordance with its mitigation policy (*Federal Register*, volume 46(15) January 23, 1981). These habitats are of high value for evaluation species and are unique and irreplaceable on a national basis or in the ecoregion section. The mitigation goal for resource category I habitats is no loss of existing habitat values. All losses of existing habitat are to be prevented because these one-of-a-kind areas cannot be replaced. Therefore, all alternatives must avoid the placement of fill in the river, in the riverine wetlands, and the disturbance of bottomland hardwoods.

The Cunard launch site is at approximately 1,000 feet elevation at the base of some steep slopes (40-65%). Soils in the project area are extremely stony silt loams referred to as Ernest-Shelocta; 15-50% of the surface is covered with stones and boulders, some of which will require a large dozer to move. The water table is high in this soil type on a seasonal basis. Soil pHs range from 4.5 to 5.5. The project area is on top of a "gob" or coal refuse pile. The depth of this refuse pile was not determined; however, the extent of surface area was mapped by the Soil Conservation Service (see appendix B). This soil type is referred to as Itmann soil, and the SCS reported that it is deep and well drained. The color ranges from black to dark grey and the pHs range from 4.5-6.4. This soil is highly erosive and can be difficult to revegetate because of the low pH, the black color, and high erosion hazard. The one exception is that the Itmann soil in this area has revegetated naturally; however, much of the vegetation in the high use area has been stripped away, causing the Itmann soil to erode and leach into the river.

During construction, this bank will either have to be stabilized or other types of mitigation will have to take place to prevent further leaching and soil material from entering the river.



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STUDY AREA

CUNARD

New River Gorge National River

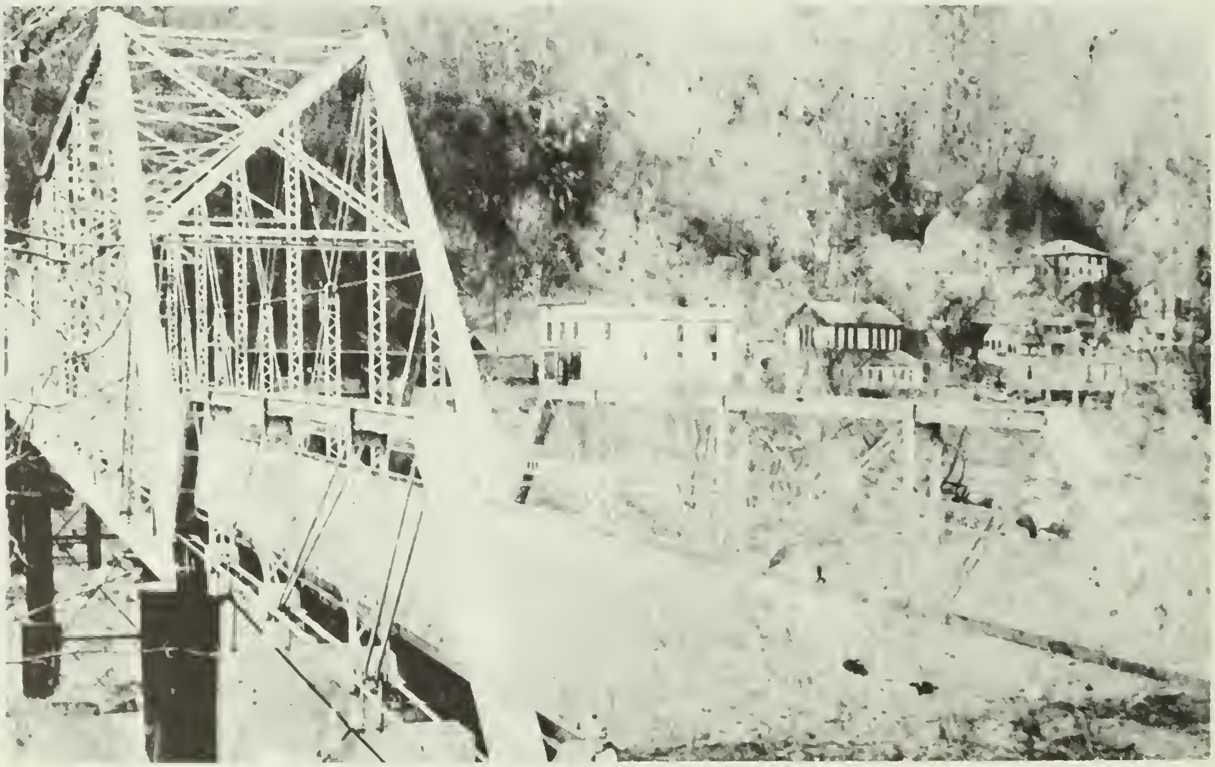
United States Department of the Interior / National Park Service

Under NPS Guidelines for implementing Executive Order 11988, Floodplain Management, the actions proposed in this document are identified as excepted from floodplain compliance because certain types of actions functionally depend on being located in or near water. The proposal will be designed to minimize impacts to the resource. The proposed parking areas are categorically excluded under 516 DM6, appendix 7 (7.4) from compliance with E.O. 11988.

CULTURAL RESOURCES

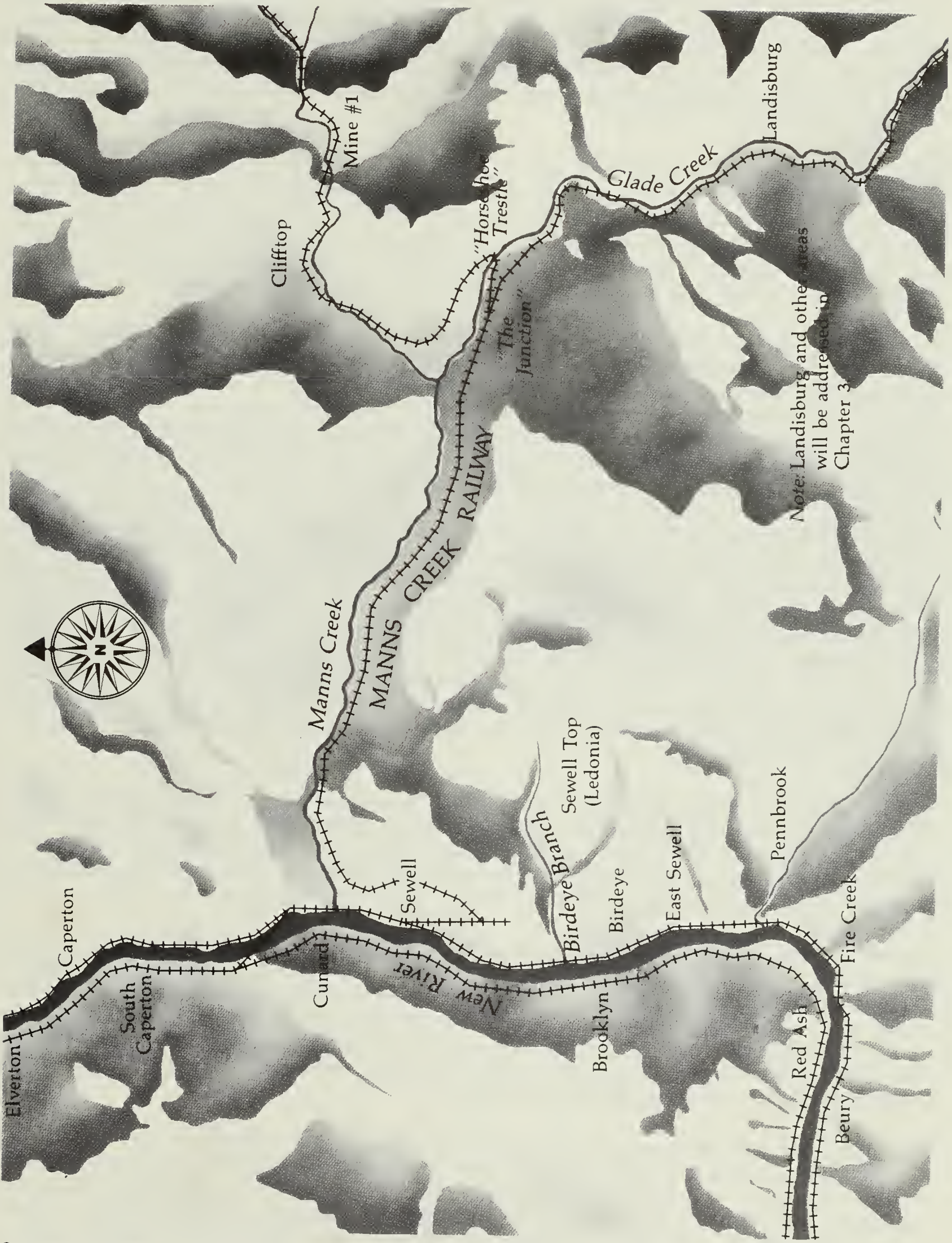
Perhaps the most historically significant fact about the Cunard site is that it is the location of the earliest known ferry crossing in the gorge. "In 1784 George Washington sensed the need for a route to the west that penetrated the great mountain barrier formed by the Blue Ridge and the Allegheny Mountains." As a result, the Virginia legislature authorized the construction of a state road to the navigable waters of the Kanawah River in 1785. "Completed in 1790, this passage, which became known as 'Old State Road'...wound down into the New River Gorge just south of Mann's Creek, crossing the river by boat (to the Cunard side) before climbing the west slope toward Vandalia (now Fayetteville)." Although the town of Sewell, on the east side of the river, became the first important settlement in the gorge, the Cunard side was too steep to support much of a settlement. The one operation at the Cunard site was a coal camp during the late 1800s and early 1900s.

The known remaining cultural resources near the site are traces of mining and railroading activities. Some prehistoric occupation occurred in the vicinity of the development site. Its integrity will be protected by directing use to other locations and by maintaining vegetative cover over the site.



Wagon bridge at Sewell built around 1900
Courtesy of Eastern National Park and Monument Association

1817 Geological Survey Map



Courtesy of Eastern National Park and Monument Association

PURPOSE AND NEED FOR THE PLAN

The Cunard site within the New River Gorge National River has been used historically by fishermen and in later years by private boaters and commercial rafting companies for river access during times of low water.

Aware of the impending demand for use of this strategic site, Congressman Nick J. Rahall II introduced legislation (HR 900) in 1987 that included provisions for improved river access at Cunard. Specifically, section 1114(a) of the bill stated that "The Secretary of the Interior shall expeditiously acquire such lands and undertake such developments and improvements, as may be necessary to provide for commercial and non-commercial access to the river near Cunard..." This legislation was enacted into law on October 26, 1988 (PL 100-534).

In response to the intent of the legislation, the National Park Service made interim improvements to the Cunard access road during the summer of 1988, enabling two-wheel-drive vehicles access to the riverbank. Temporary sanitary facilities were also installed and improvements were made to simplify raft launching by installing a staircase made of railroad ties and adding steel hand rails so that inflated rafts could be slid down to the water's edge. Previously, boaters had been sliding their boats down the steep bank, stripping away the vegetation and creating conditions for erosion to occur.

Because of improvements to the road and launch ramp, use at Cunard has increased significantly. Before the summer of 1988, commercial rafting companies started their trips at Thurmond and only used Cunard during periods of low water in late summer. With the improvement of the road, the commercial outfitters began to use Cunard on a regular basis and discontinued use of Thurmond except for those users that preferred some slow water. The character of the river from Thurmond to Cunard is slow, with only one class III rapid. From Cunard to Fayette Station, the river drops at a steeper gradient and the rapids are rated up to class V. Commercial rafters would like to use Cunard as a permanent put-in that would enable them to run two trips per day instead of one trip per day by originating upriver at Thurmond.

Increased use at Cunard has also caused loss of vegetation and soil from the existing launch area. The area stripped of vegetation on the launch ramp has at least doubled in size in one season. The loss of vegetation and trampling by people and rafts then cause serious soil loss on the dirt ramp itself. Exposed tree roots are now visible throughout the use area, and in places, as much as 5 vertical feet of soil have eroded.

Fishing activity has also increased. Cunard is regularly used by local fishermen throughout the summer and fall. Because many of the fishermen use trot lines, other boaters need to give them wider berth when passing. There is conflict between the two user groups that dates back long before the creation of the national river. Rafters and fishermen make use of the same river eddies that provide calm water for both groups. Because these uses are not compatible within the same eddy, conflict is likely to continue unless both groups make honest attempts to respect each other's needs.

Ironically, the improvements to the road have temporarily aggravated the conflict by increasing the amount of vehicular traffic without providing adequate circulation space to avoid congestion. Interim improvements were made in the spring of 1989 to help ease this problem. More permanent and adequate facilities are required to accommodate vehicle circulation, parking for different user groups, unloading and loading boats, and to support basic visitor comfort and sanitation requirements.

Because much of the site is covered by coal refuse, erosion is a constant concern that is exacerbated by the increased amount of use. This plan is needed to propose ways to serve the needs of Cunard's user groups, to minimize the potential for conflict, and to prevent soil erosion at the site. The plan will identify the most effective arrangement of necessary facilities and improvements with the least impact on the natural and cultural resources at the site.

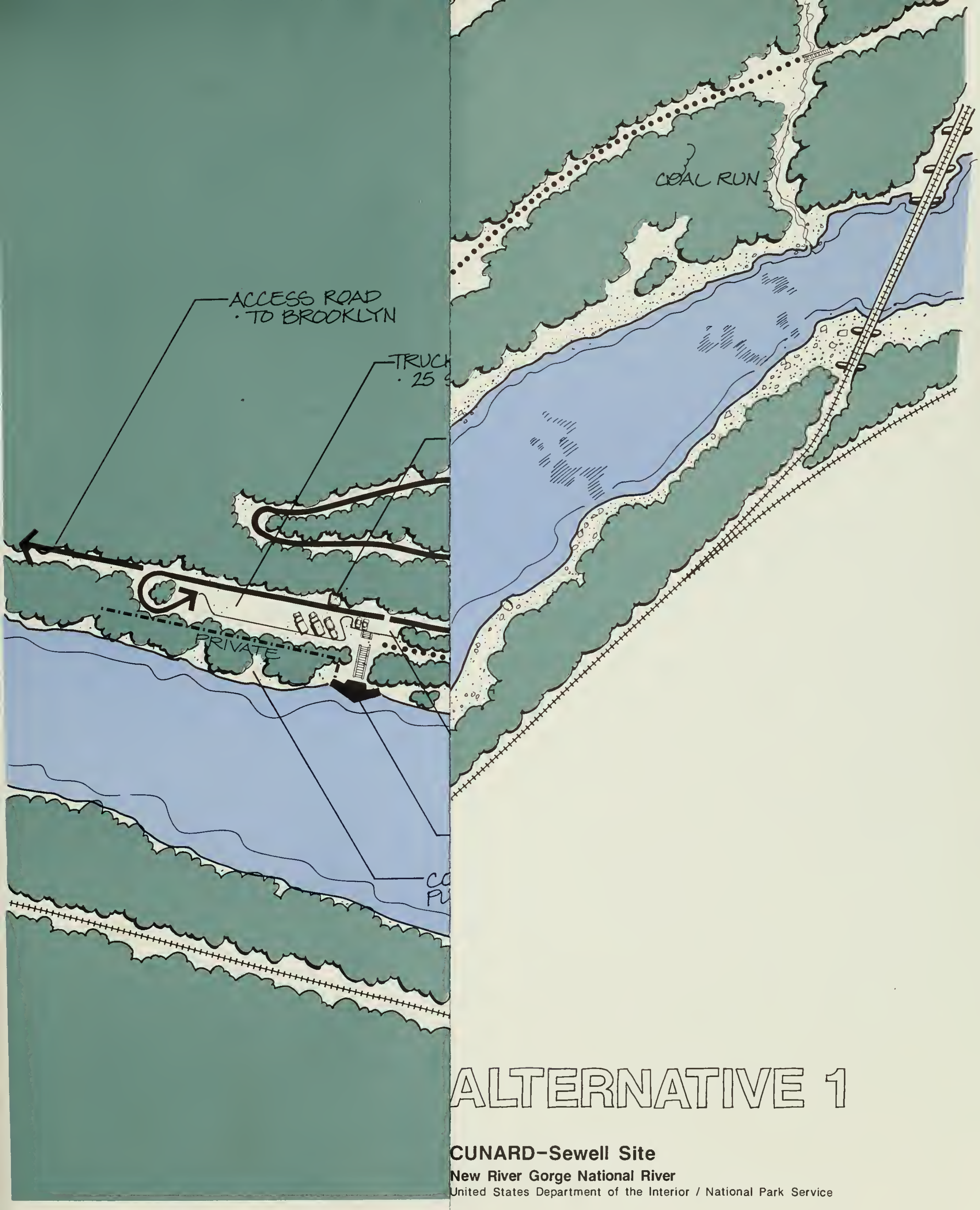
DESCRIPTION OF ALTERNATIVES

The following table presents four development concept alternatives designed to achieve the planning objectives described in the beginning of this document and to address the issues outlined in the previous section. The no-action alternative represents a continuation of existing conditions; therefore, it is not shown on the table (see the Existing Conditions map at the end of this section). The alternatives contain many of the same elements but are arranged in different configurations. The four action alternatives assume that the privately owned parcel south of the NPS launch ramp would remain. However, should the National Park Service acquire that property (on a willing-seller basis), the commercial put-in/take-out sites (shown on the alternative maps following the table) would be improved for both commercial and public access by the National Park Service.

Table 1: Comparison of Alterantives

Feature	Alternative 1	Alternative 2	Alternative 3	Alternative 4 (Preferred)
Access road	Improve drainage and road surface; create pullouts	Same as alt. 1	Pave entire access road	Same as alt. 1; establish manned control point at top of road to regulate in/out traffic when volume of use requires
	Pave from Rt. 9 to top of grade	Oil road from Rt. 9 to top of grade		Same as alt. 1
Cunard top gas plant site	Improve access road and establish parking area for 10 cars	No trailhead at top	Same as alt. 1	Same as alt. 1
Cunard bottom existing parking	Expand and redesign for 10 cars	No change	Eliminate existing parking and revegetate site	Same as alt. 2
truck and trailer parking	Establish back-in parking for 25 vehicles	Establish pull-thru parking for 20 vehicles	Same as alt. 2	Same as alt. 2
trailhead parking	No designated trailhead parking at bottom	Establish trailhead parking for 15 cars in area to south of new truck and trailer parking	No trailhead parking at bottom	Same as alt. 3
RR grade (south)	Improve as access road to Brooklyn fishing site	Convert to trail use with vehicle access to cemeteries by permit only	Same as alt. 1	Same as alt. 1
RR grade (north)	Pedestrians only	Same as alt. 1	Improve for vehicle access to new raft launch area; use existing RR grade only (0.5 mile)	Improve for vehicle access to new raft launch area (0.5 mile); construct loop with a new road segment from

				existing RR grade down to upper riverbank and looping back up to the RR grade at Coal Run (0.2 mile)
			Reconstruct 0.3 mile of the abandoned access road to complete the one-way loop back to the Cunard access road	Reconstruct 0.3 mile of the abandoned access road to complete the one-way loop back to the Cunard access road
			Establish parking pullouts along the road wherever possible (approx. 500 lin. ft.)	Establish truck and trailer parking (15 vehicles) along new riverbank road segment
			Provide five parking spaces for fishermen at the terminus of the RR grade near Coal Run	Provide five parking spaces for fishermen along the new riverbank road segment near Coal Run
NPS launch ramp	No change	No change	No change	No change
New launch area	None	None	Install three raft slides from bench level to the river bank; create gravel staging area along the shoreline at launch site	Create gravel pathways from parking areas to the launch area
Comfort stations	Install permanent comfort station	Provide portable toilets during the visitor use season	Install permanent comfort stations near both NPS launch areas	Same as alt. 3

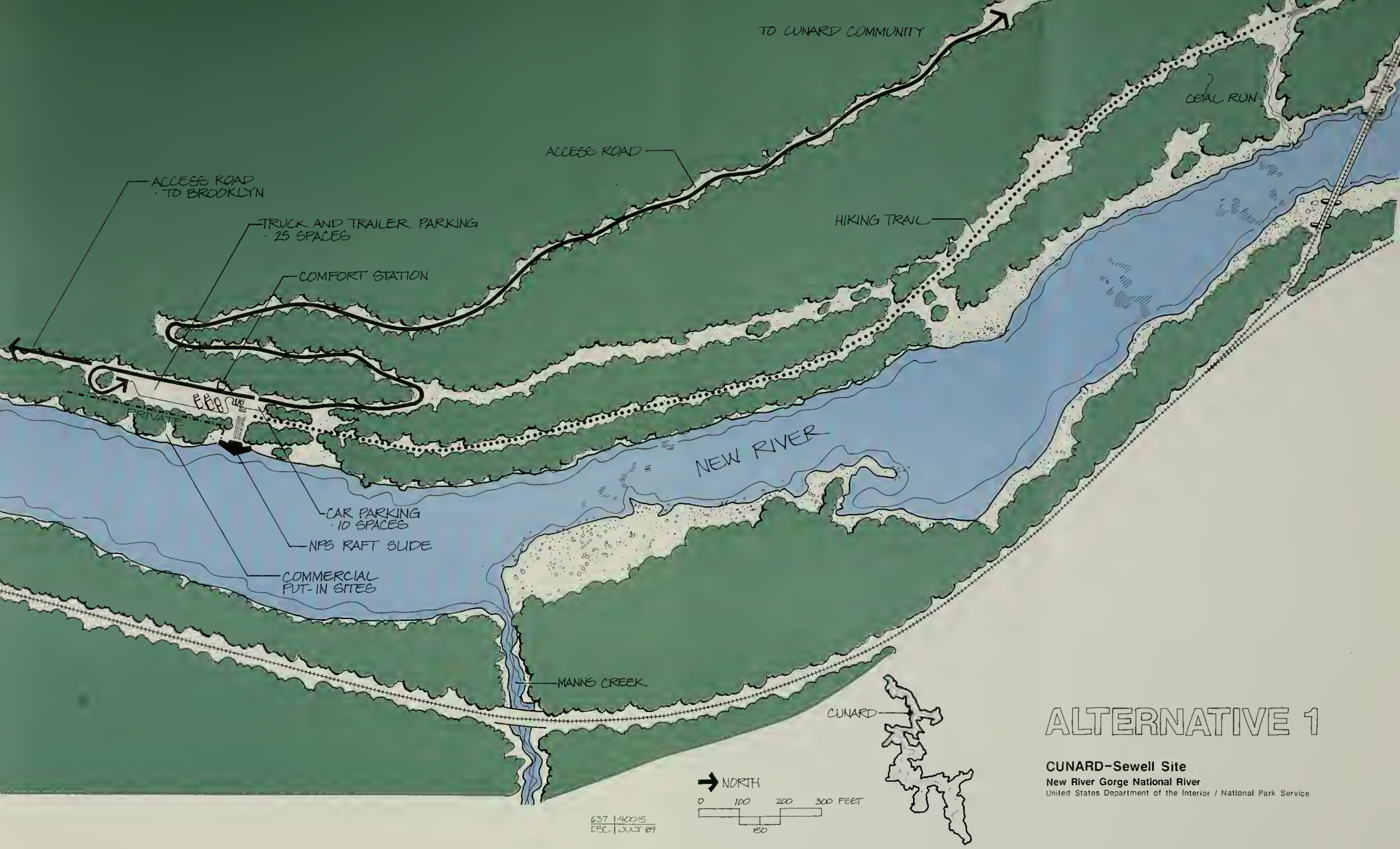


ALTERNATIVE 1

CUNARD–Sewell Site

New River Gorge National River

United States Department of the Interior / National Park Service

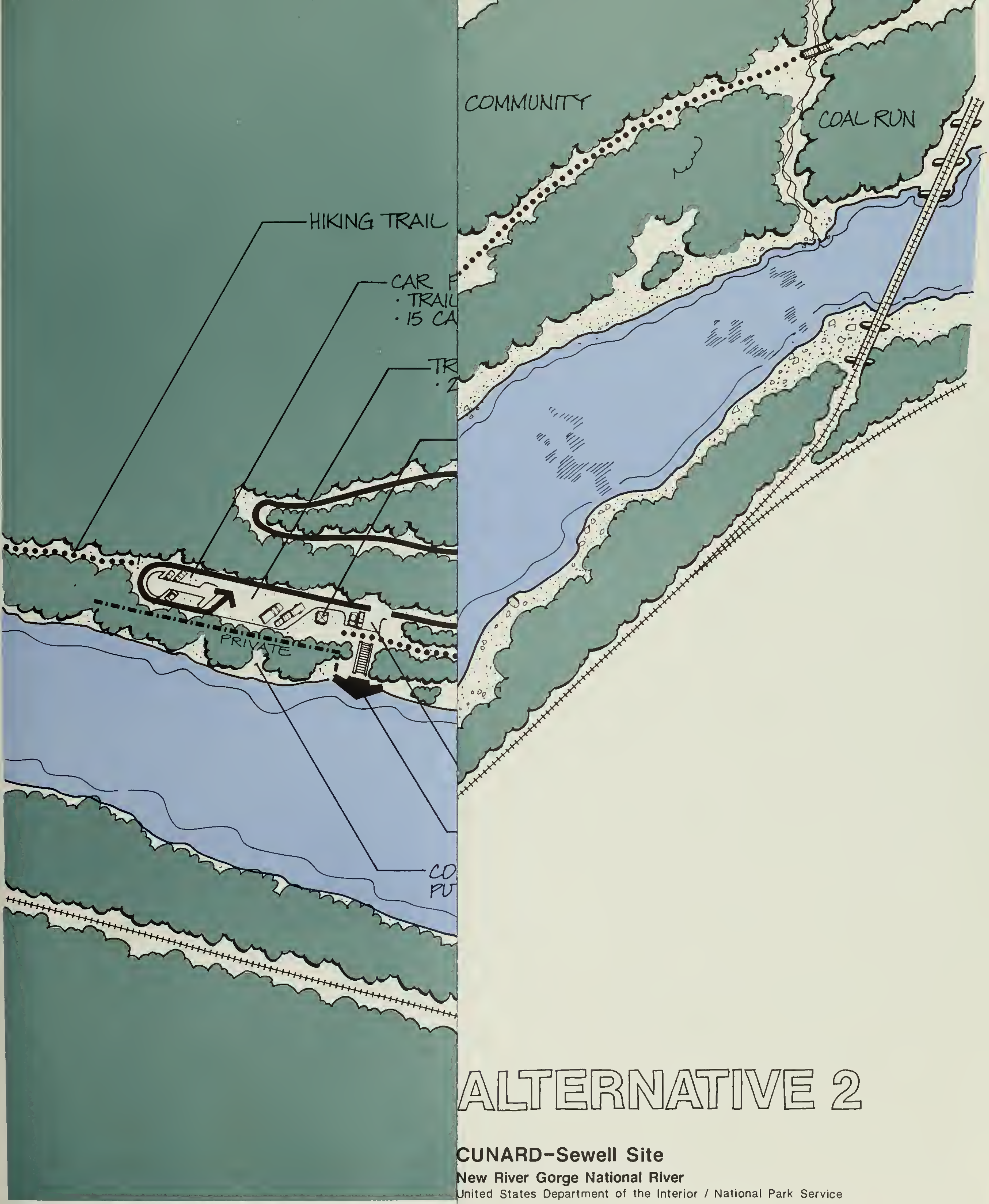


ALTERNATIVE 1

CUNARD–Sewell Site

New River Gorge National River

United States Department of the Interior / National Park Service



ALTERNATIVE 2

CUNARD–Sewell Site

New River Gorge National River

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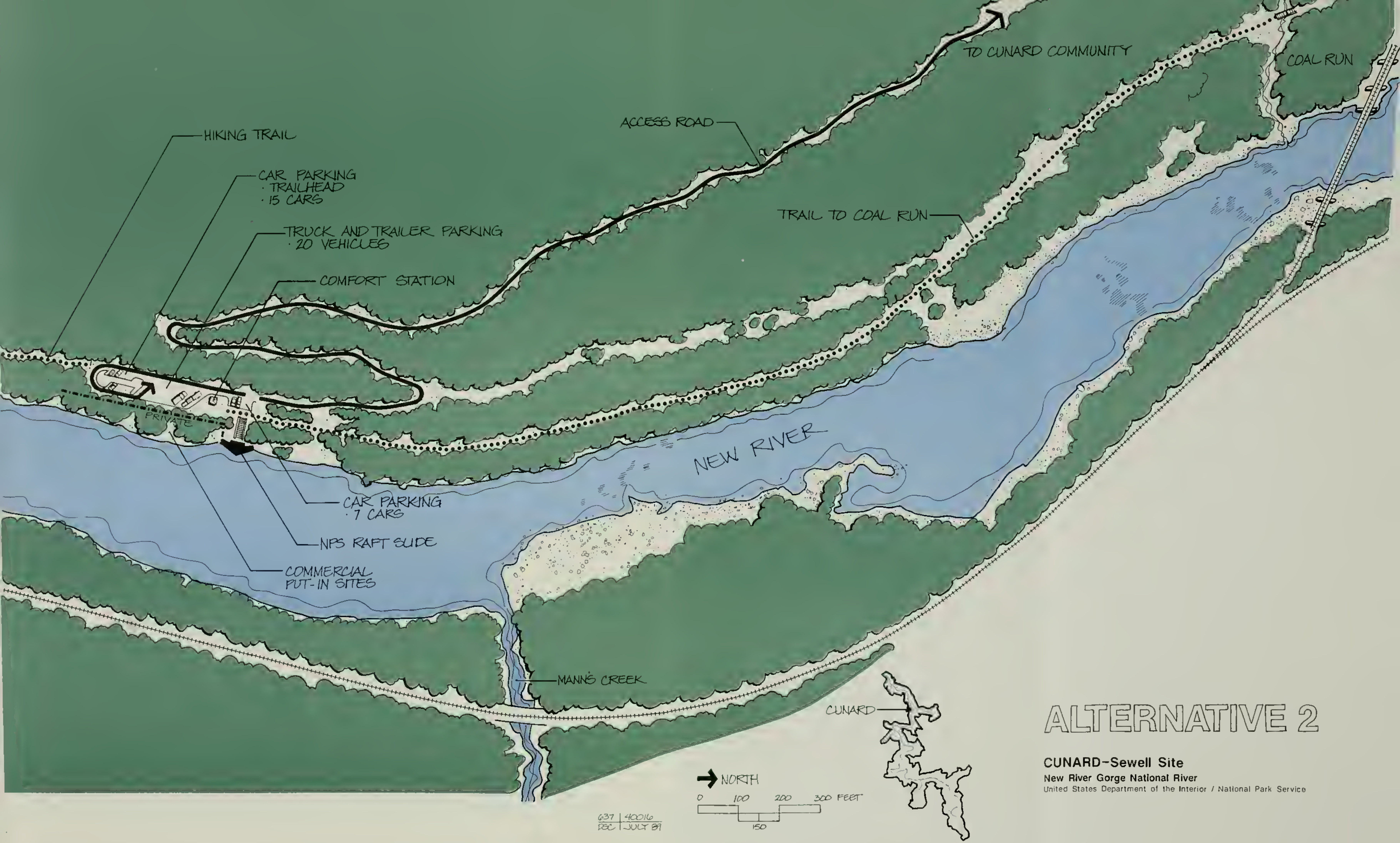
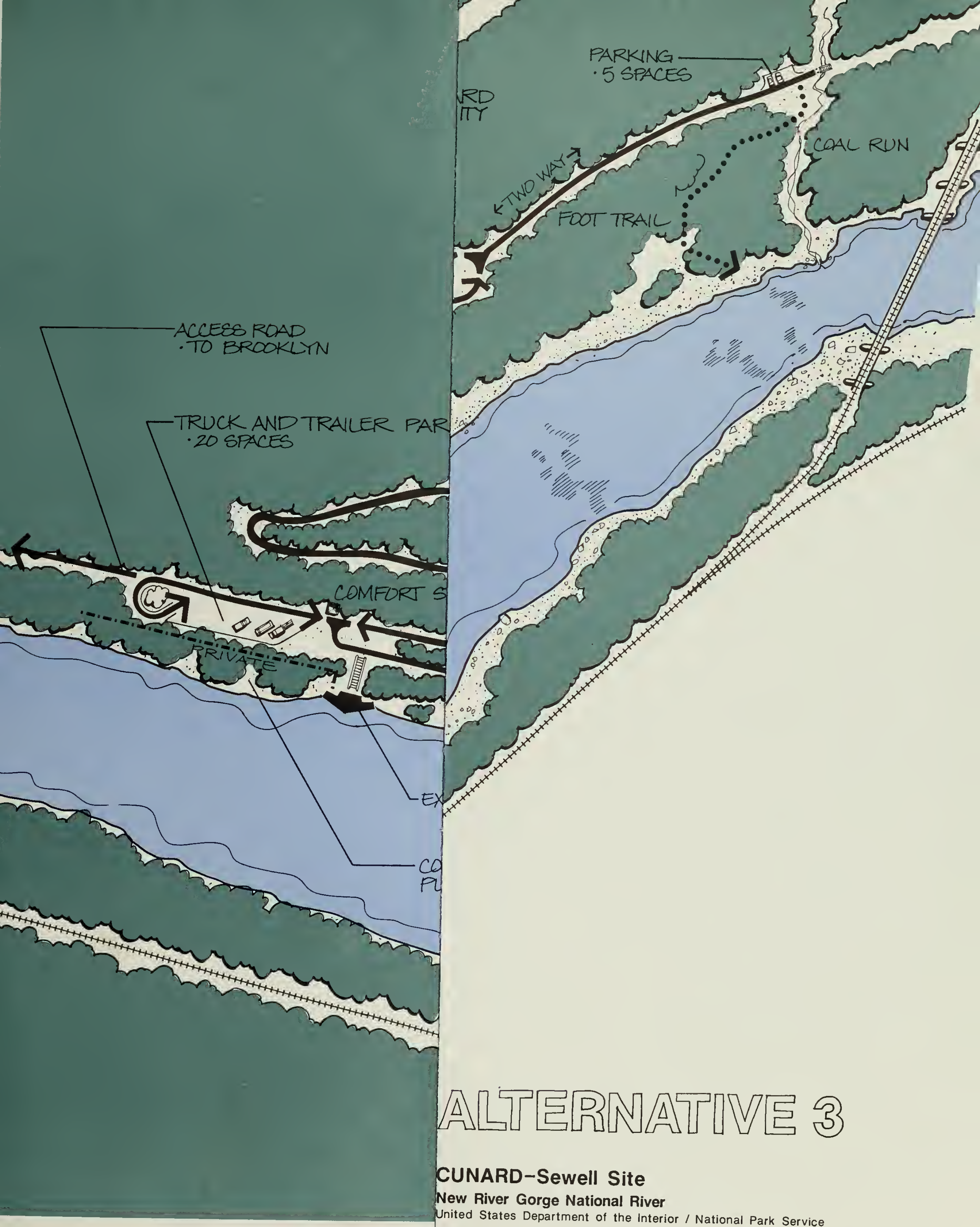


ALTERNATIVE 2

CUNARD-Sewell Site

New River Gorge National River

United States Department of the Interior / National Park Service



ALTERNATIVE 3

CUNARD–Sewell Site

New River Gorge National River

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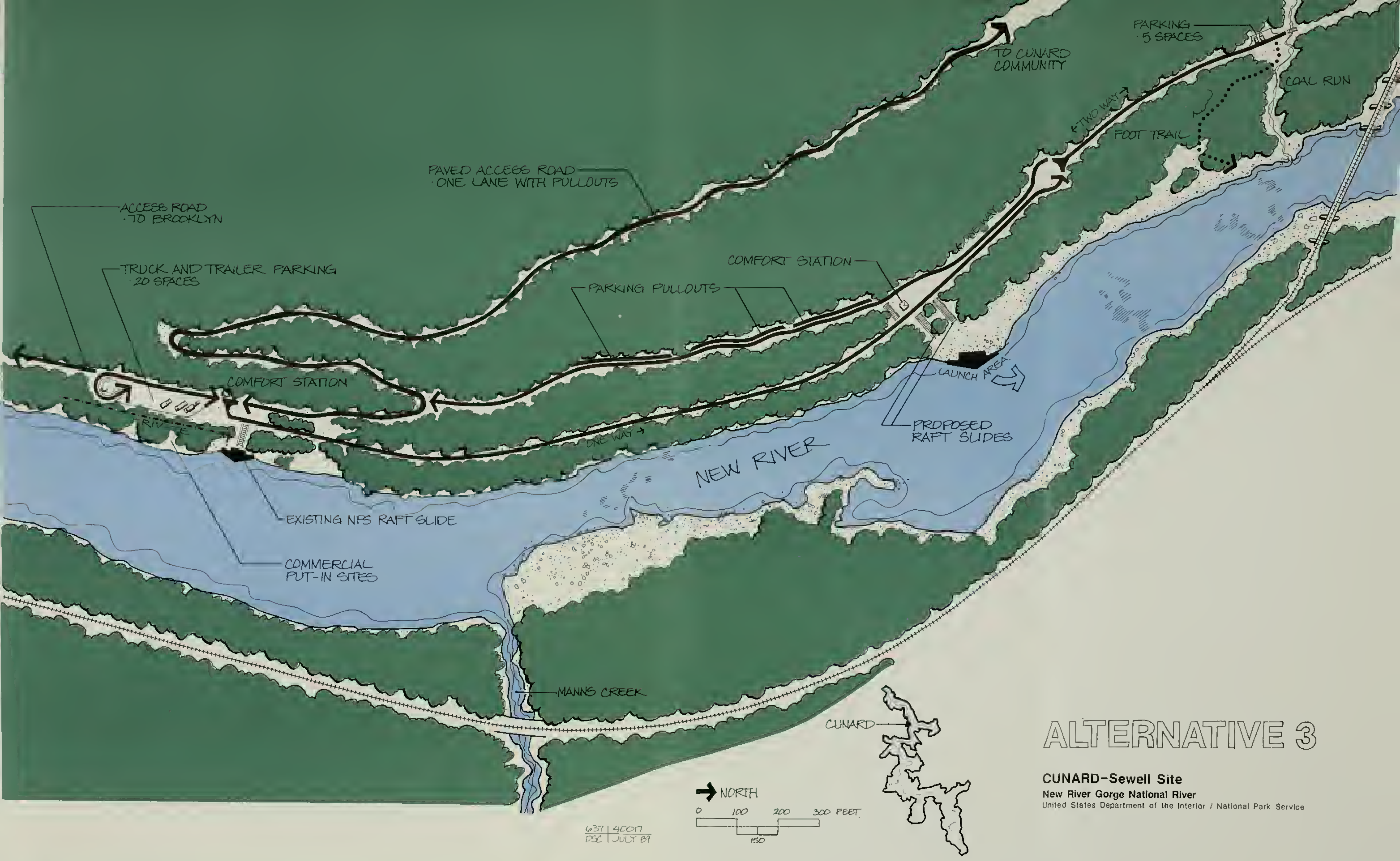
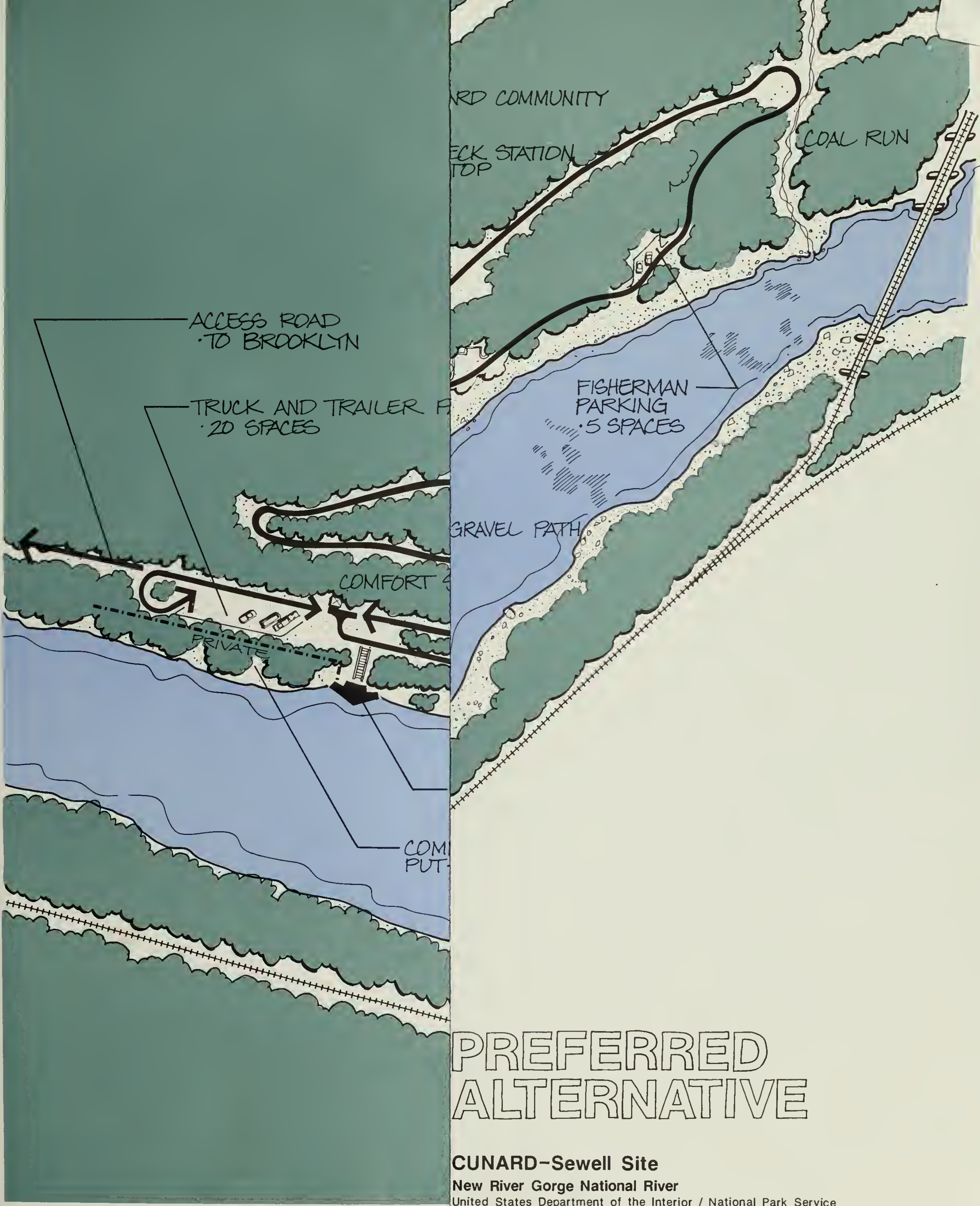


ALTERNATIVE 3

CUNARD-Sewell Site

New River Gorge National River

United States Department of the Interior / National Park Service

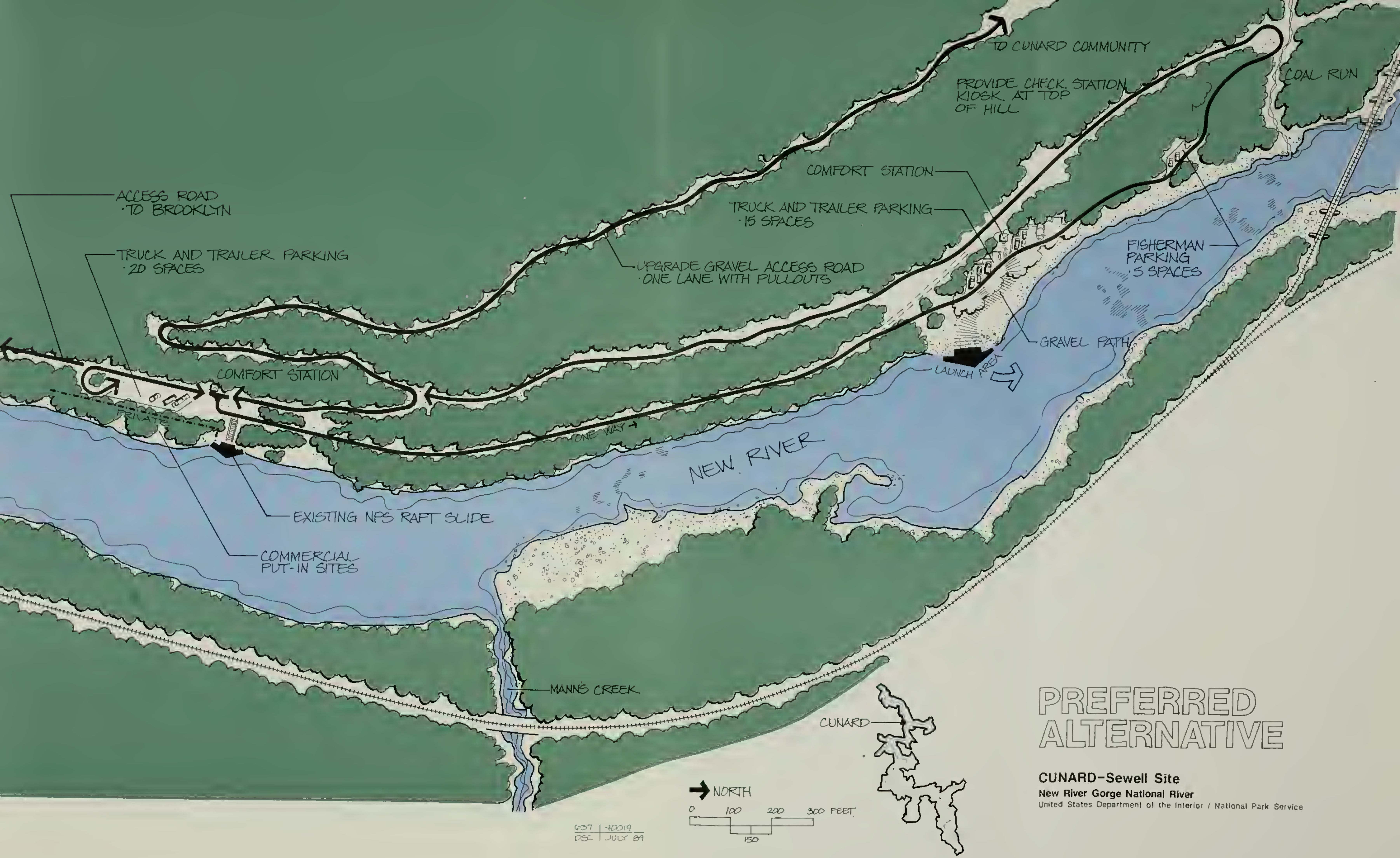


PREFERRED ALTERNATIVE

CUNARD–Sewell Site

New River Gorge National River

United States Department of the Interior / National Park Service

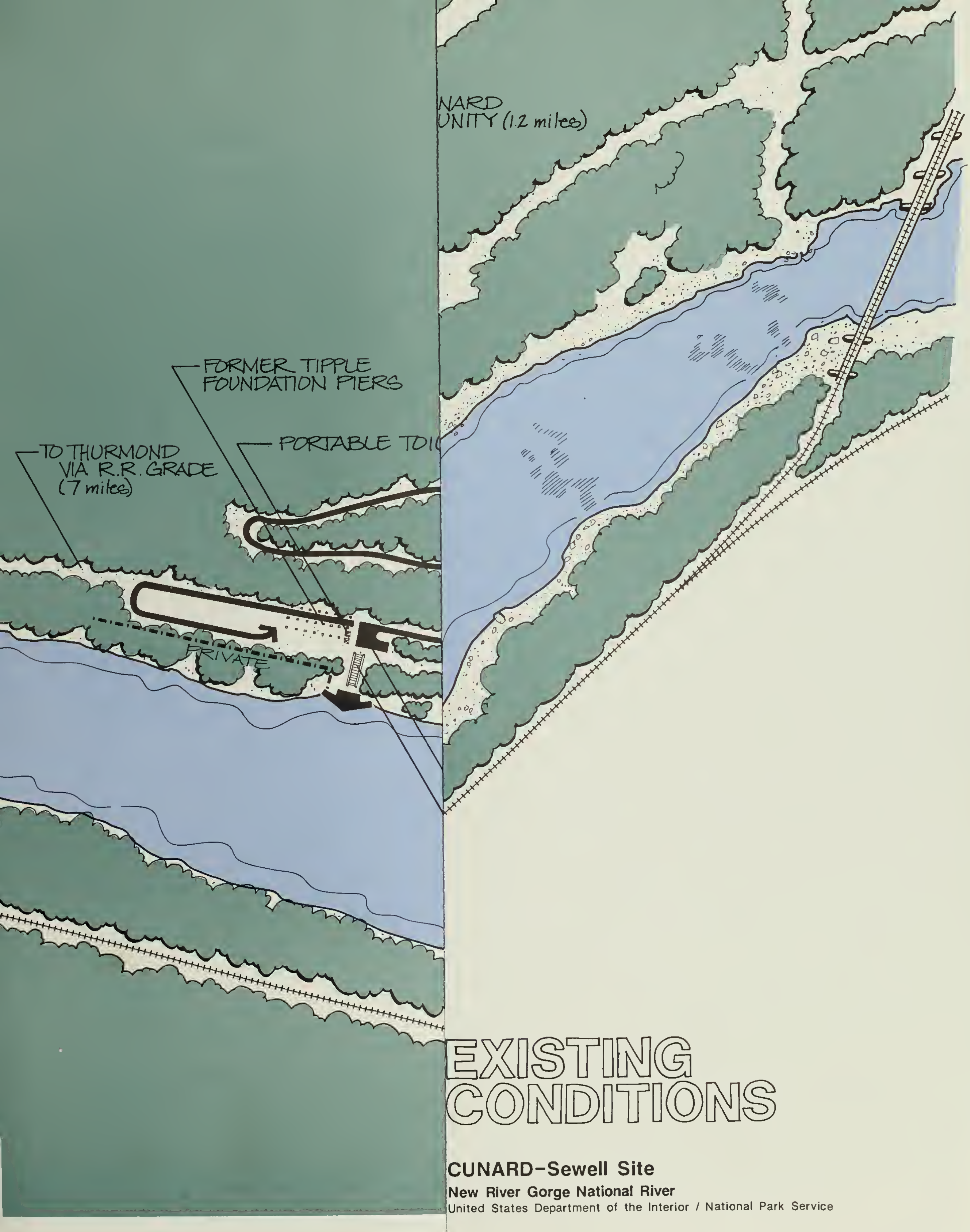


PREFERRED ALTERNATIVE

CUNARD–Sewell Site

New River Gorge National River

United States Department of the Interior / National Park Service

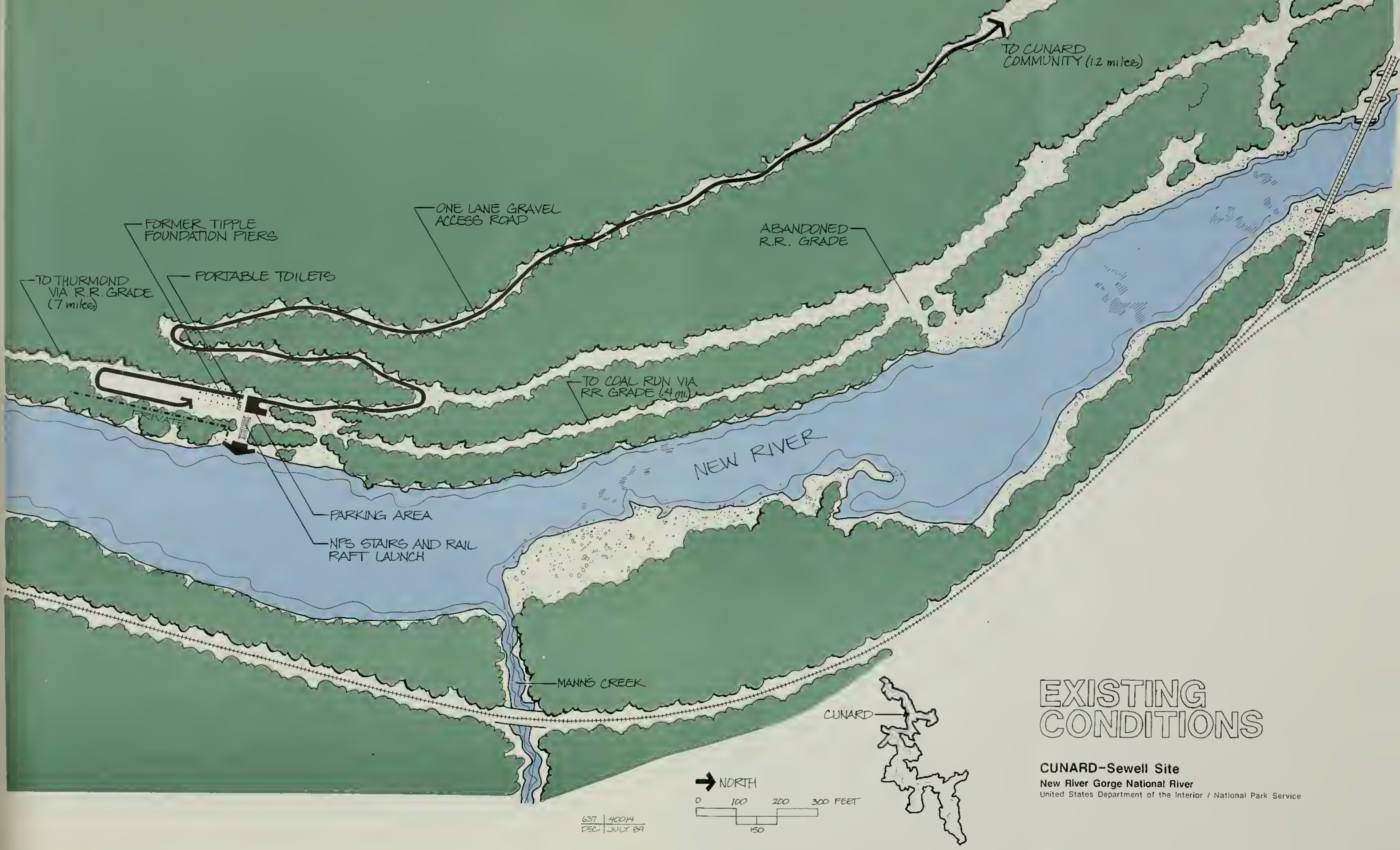


EXISTING CONDITIONS

CUNARD–Sewell Site

New River Gorge National River

United States Department of the Interior / National Park Service


TO CUNARD COMMUNITY (1.2 miles)
ONE LANE GRAVEL ACCESS ROAD
FORMER TIPPLE FOUNDATION PIERS
ABANDONED R.R. GRADE
TO THURMOND VIA R.R. GRADE (7 miles)
PORTABLE TOILETS
TO COAL RUN VIA RR GRADE (.4 mi.)
PRIVATE
NEW RIVER
PARKING AREA
NPS STAIRS AND RAIL RAFT LAUNCH
MANN'S CREEK
CUNARD
NORTH
0 100 200 300 FEET
150
637 | 40014
DSC | JULY 89

EXISTING CONDITIONS

CUNARD–Sewell Site

New River Gorge National River

United States Department of the Interior / National Park Service

COST COMPARISONS

The following charts show preliminary cost estimates for the four action alternative concepts presented above. They are only based on preliminary estimates of sizes or quantities and are intended to be used for comparison purposes. More accurate estimates will be prepared during the design phase of this project.

Table 2: Cost Estimates, Alternative 1

Development Item	Gross Construction Cost	Advance and Project Planning Cost	Total Cost
Cunard top			
Acess road improvement	$42,000	$8,000	$50,000
Gravel parking	11,000	2,000	13,000
Access road			
Gravel road improvement	$682,000	$130,000	$812,000
Drainage	99,000	19,000	118,000
Guardrail	485,000	93,000	578,000
Paving	79,000	15,000	94,000
Cunard bottom			
Redo existing parking	$11,000	$2,000	$13,000
Site clearing	14,000	3,000	17,000
Track and trails parking	66,000	13,000	79,000
Comfort station	26,000	5,000	31,000
RR grade (south)			
Gravel road/ trail to Brooklyn	$92,000	$18,000	$110,000
RR grade (north)			
Pedestrians use only	0	0	0
Total	**$1,607,000**	**$308,000**	**$1,915,000**

Table 3: Cost Estimates, Alternative 2

Development Item	Gross Construction Cost	Advance and Project Planning Cost	Total Cost
Cunard top			
(no trailhead at top)	–	–	–
Access road			
Gravel road improvement	262,000	50,000	312,000
Drainage	99,000	19,000	118,000
Guardrail	485,000	93,000	578,000
Oil road (16 applications)	0	0	32,000/yr
Cunard bottom			
Redo existing parking	11,000	2,000	13,000
Site clearing	14,000	3,000	17,000
Track and trails parking	66,000	13,000	79,000
Comfort station	26,000	5,000	31,000
RR grade (south)			
Gravel road/trail to Brooklyn	92,000	18,000	110,000
RR grade (north)			
Pedestrians use only	0	0	0
Total	**1,055,000**	**203,000**	**1,290,000**

Table 4: Cost Estimates, Alternative 3

Development Item	Gross Construction Cost	Advance and Project Planning Cost	Total Cost
Cunard top			
Access road paving	55,000	11,000	66,000
Gravel parking	11,000	2,000	13,000
Access road			
Paving	415,000	80,000	495,000
Drainage	99,000	19,000	118,000
Guardrail	485,000	93,000	578,000
Cunard bottom			
Reclaim parking area	3,000	1,000	4,000
Site clearing	14,000	3,000	17,000
Track and trails parking	53,000	10,000	63,000
Comfort station	26,000	5,000	31,000
RR grade (south)			
Gravel road to Brooklyn	92,000	18,000	110,000
RR grade (north)			
Road improvement and paving	122,000	24,000	146,000
Parking pullouts (paved)	27,000	5,000	32,000
Fishermen parking	8,000	2,000	10,000
Raft slides	5,000	1,000	6,000
Gravel paths	26,000	5,000	31,000
Comfort station	26,000	5,000	31,000
Total	**1,467,000**	**284,000**	**1,751,000**

Table 5: Cost Estimates, Alternative 4 (Preferred)

Development Item	Gross Construction Cost	Advance and Project Planning Cost	Total Cost
Cunard top			
Access road improvements	26,000	5,000	31,000
Gravel parking	11,000	2,000	13,000
Access road			
Gravel road improvement	262,000	50,000	312,000
Drainage	99,000	19,000	118,000
Guardrail	485,000	93,000	578,000
Paving	79,000	15,000	94,000
Cunard bottom			
Reclaim parking area	3,000	1,000	4,000
Site clearing	14,000	3,000	17,000
Track and trails parking	53,000	10,000	63,000
Comfort station	26,000	5,000	31,000
RR Grade (south)			
Gravel road to Brooklyn	92,000	18,000	110,000
RR Grade (north)			
Road improvement/construction	393,000	75,000	468,000
Truck and trailer parking	40,000	8,000	48,000
Fishermen parking	6,000	1,000	7,000
Gravel paths	26,000	5,000	31,000
Comfort station	26,000	5,000	31,000
Total	**1,641,000**	**315,000**	**1,908,048**

ENVIRONMENTAL CONSEQUENCES

ALTERNATIVE 1

Impacts on Natural Resources

Approximately 2 acres would be impacted by the development of additional parking areas, comfort stations, and pullouts, and 1 1/2 acres would be cleared for parking. This would impact about 500 trees that are 2" to 4" in diameter. No known endangered/threatened or rare species would be affected; however, a rare plant survey would need to be completed in the spring during flowering season before construction begins. Impacts on soils and vegetation from visitor use should be reduced by concentrating visitor use and access to a defined area.

There would be no significant impacts on wildlife, fisheries, or water quality. This area is currently subjected to extensive human use and impacts during the summer season. Small mammals or bird species inhabiting the construction area and immediately adjacent to it might be disturbed or displaced during construction. There would be no construction within the New River and no significant impacts to the riverine wetlands and bottomland hardwoods.

The coal refuse pile would require stabilization or removal before any soil could be removed. With the exception of the space for 10 cars (see map), most of the parking is outside the coal refuse pile area. Sedimentation barriers would need to be constructed to prevent the coal refuse and other soil material from entering the river. A sedimentation plan would need to be filed with the state of West Virginia.

Actions proposed in this alternative would improve the conditions at Cunard. A defined visitor use and boat launching area would prevent any further destruction to vegetation and erosion of the site.

Impacts associated with improvement of the railroad grade to a road south to Brooklyn are not expected to be permanent or significant. The grade is already used as a road for fishermen and for access to a cemetery. Only minor clearing and provisions would be required for drainage.

Impacts associated with improvement of the Cunard road are also not expected to be permanent or significant because the road has been used for many years. By improving the drainage and road surface, the impacts associated with poor drainage, erosion, and the rough road surface would decrease.

The comfort stations should be vault type and pumped out regularly to avoid any leaching of solid wastes into the river.

No significant impact to air quality would occur, except for a minor, short-term reduction in air quality caused by dust and fumes in the immediate construction area.

Impacts on Cultural Resources

Improvement of the Cunard road and construction of additional parking areas could result in the loss of the tipple foundations on the site. The location and condition of the existing features should be recorded during the archeological evaluation that is required before construction.

Impacts on Visitor Use

The visitor experience and use of the area would be improved under this alternative. Development of an expanded parking area would improve traffic circulation and reduce congestion at the site. Improvements and expansion of the site would benefit the visiting public and commercial rafting companies who fish, raft, or kayak the river. The trailhead at Cunard top would provide additional visitor use of the area. Improvement of the access road would allow more visitors access to the site in a safe and enjoyable manner.

ALTERNATIVE 2

Impacts on Natural Resources

The impacts on natural resources described under alternative 1 would be the same under alternative 2.

In addition to those impacts, oiling the upper section of the road from Rt. 9 to the top of the grade would decrease the amount of dust in the air; however, the oil could have an adverse effect on the marshy area adjacent to the road, polluting the water and killing plant and animal life.

Impacts associated with improvement of the Cunard road are not expected to be permanent or significant because the road has already been used for many years. By improving the drainage and road surface, the impacts from poor drainage, erosion, and the rough road surface would decrease.

Impacts on Cultural Resources

Improvements on the Cunard road and construction of additional parking areas could result in the loss of the known tipple foundations at the site. The location and condition of the existing features should be recorded during the archeological evaluation that is required before construction.

Impacts on Visitor Use

The visitor experience and use of the area would be greatly improved. Development of the loop road and expanded parking would relieve traffic congestion and allow easier access for both commercial and public rafters to the river. Trailhead development at the bottom would provide opportunities for hikers and fishermen. Limiting access to the cemetery would guard against vandalism; however, local residents might find it inconvenient.

ALTERNATIVE 3

Impacts on Natural Resources

Approximately 5 to 6 acres would be impacted by the development of additional parking areas, roads, comfort stations, and pullouts; 2 acres would require clearing for parking spaces and pullouts. This would impact approximately 550 trees that are 2" to 6" in diameter, and 1/4 acre of existing parking would be revegetated. No known endangered/threatened or rare species would be impacted; however, a rare plant survey would be completed in the spring during the flowering season before construction begins. Impacts to soils and vegetation from visitor use should be reduced by concentrating visitor use and access to a defined area.

Impacts to the bottomland hardwood habitat would be minimized by doing only as much clearing of the site as would be necessary.

Wildlife, fisheries, or water quality would not be affected significantly. This area is currently subjected to extensive human use and impacts during the summer season. Small mammals or bird species inhabiting the construction area and immediately adjacent to it might be disturbed or displaced during construction. There would be no construction within the New River.

Impacts associated with improvement of the Cunard road are not expected to be permanent or significant because the road has been used for many years. Drainage and road surface improvements would decrease erosion and drainage problems and make the road's surface smoother. Approximately 1 mile of the road would be impacted by paving.

No significant impact to air quality would occur; however, minor, short-term reduction in air quality caused by dust and fumes would occur in the immediate construction area.

Impacts associated with improvement of the railroad grade to a road south to Brooklyn are not expected to be permanent or significant. The grade is already used as a road and would only require minor clearing and provisions for drainage.

The reconstruction of 0.3 mile of the abandoned access road to complete the one-way loop road back to the Cunard road would require the removal of approximately 50 to 70 trees that are 4" to 8" in diameter.

The raft slides would require revegetation of any exposed soil after construction to prevent erosion of the bank. The gravel launch site would impact approximately 1/4 acre. It is recommended that river stones, rather than gravel, be used because this area is in a floodplain and could require replacement of gravel annually. Approximately 35 Sweet Gum trees would be removed.

The coal refuse pile would require stabilization before any movement of soil material could occur. Sedimentation barriers would need to be constructed to prevent the coal refuse and other soil material from entering the river. A sedimentation plan would need to be filed with the state of West Virginia.

The comfort stations should be vault type and pumped out regularly to avoid any leaching into the river of solid wastes.

A 404 permit from the U.S. Army Corps of Engineers would be required to construct the launch site.

Impacts on Cultural Resources

No known impacts to cultural resources would occur. Improvements to the Cunard road and the construction of additional parking areas could result in the loss of the known tipple foundations on the site. The location and condition of the existing features should be recorded during the archeological evaluation that is required before construction.

Impacts on Visitor Use

Visitor use in the area would be greatly improved and increased with the additional launching areas for boats and parking for fishermen and boaters. This alternative would allow for commercial and public use of the launching area because of additional launching sites. Improvement of the access road to the river would allow more visitors safe and enjoyable access to the area.

ALTERNATIVE 4 (PREFERRED ALTERNATIVE)

Impacts on Natural Resources

Approximately 6 to 7 acres would be affected by the development of additional parking areas, roads, comfort stations, and pullouts. About 2 to 3 acres would require clearing for parking spaces, the new road, and pullouts, which would affect approximately 650 trees that are 2" to 6" in diameter. About 1/4 acre of existing parking space would be revegetated. No known endangered/threatened or rare species would be impacted; however, a rare plant survey would be completed in the spring during the flowering season before construction begins. Impacts to soils and vegetation from visitor use should be reduced by concentrating visitor use and access to a defined area.

Impacts to the bottomland hardwood habitat would be minimized by clearing only what is necessary at the site.

Impacts on wildlife, fisheries, and water quality and impacts associated with improvement of the Cunard road would be the same as described under alternative 3.

No significant impact to air quality would occur. Dust and fumes would cause minor, short-term reduction in air quality in the immediate construction area.

Impacts associated with improvement of the railroad grade to a road south to Brooklyn are not expected to be permanent or significant. The grade is already used as a road and would only require minor clearing and provisions for drainage.

Reconstruction of .3 mile of the abandoned access road to complete the one-way loop road back to the Cunard road would require the removal of approximately 50 to 70 trees from 4" to 8" in diameter.

The gravel launch site would impact approximately 1/4 acre. It is recommended that river stones, rather than gravel, be used because this area is in a floodplain and the gravel might need replaced annually. Gravel pathways leading down to the river from the staging area would not have a significant impact on the resource. Approximately 35 Sweet Gum trees would be removed.

The coal refuse pile would require stabilization or removal before any movement of soil material could occur. Sedimentation barriers would need to be constructed to prevent the coal refuse and other soil material from entering the river. A sedimentation plan would need to be filed with the state of West Virginia.

As indicated under alternative 3, the comfort stations should be vault type and pumped out regularly to avoid any leaching into the river of solid wastes.

A 404 permit from the Army Corps of Engineers would be required to construct the launch site.

Impacts on Cultural Resources

Impacts on cultural resources would be the same as described under alternative 3.

Impacts on Visitor Use

As described under alternative 3, visitor use in the area would be greatly improved and increased with the additional launching areas for boats and parking for fishermen and boaters. In addition, this alternative would allow for better commercial and public use of the launching area because of the additional launching sites and direct access to the river. Improvement of the access road to the river would allow more visitors safe and enjoyable access to the area.

ALTERNATIVE 5 (NO ACTION)

Impacts on Natural Resources

Erosion and destabilization of the bank and coal refuse or "gob pile" would occur through continued use of the area as a rafting put-in. Vegetation in the area would be severely impacted from continued undefined use of the area, and the river would continue to be polluted by runoff from the coal refuse pile.

Impacts on Cultural Resources

Remains of the coal camp would not be disturbed under this alternative.

Impacts on Visitor Use

If improvements were not made to the Cunard area, vehicle congestion would continue to be a major problem with commercial rafting companies, the visiting boating public, and local and public fishermen. An interim turnaround at the bottom of the access road that is being constructed by the park should ease some of the vehicle congestion; however, if adequate parking is not provided, the turnaround's effect would be minimal.

FUTURE COMPLIANCE REQUIREMENTS

Consult and file a sedimentation plan with the state of West Virginia before construction begins.

Consult with the U.S. Army Corps of Engineers to obtain 404 permit.

Obtain results from rare and threatened endangered plant and animal survey.

Complete an archeological evaluation and testing of areas that will be disturbed before any construction. Mitigation as required will be performed.

SUMMARY OF PUBLIC INVOLVEMENT

Public meetings were held in Cunard and Oak Hill on November 30, 1988, and December 1, 1988, respectively, to allow citizens to respond to the preliminary alternative development concepts that were presented at those sessions.

Cunard Community Meeting. . . . November 30, 1988

The meeting in Cunard was attended by 14 residents of Cunard. The first part of the meeting was a workshop on how those in attendance liked to use the park. The participants identified their favorite park activities and discussed what factors either contributed to or detracted from the experience.

Favorite activities of meeting participants:

Activity	Factors positively affecting the experience
Hunting	Quiet area without other activity. . . good company
Fishing	Steady water level. . . rafters knowledgeable and respectful of fishermen's needs
Camping	Privacy and quiet
Hiking	Separation from vehicles
Picnicking	Attractive site without litter
Swimming	Calm hole in river. . . sunny flat beach
Private rafting	Access to river put-in/take-out
Motorbiking	Access to old roads

The second half of the meeting was spent discussing problems that the residents of Cunard were concerned about. These included the following:

There is too much traffic congestion at Cunard bottom.

Thoughtless park users are littering the shoreline--both private and commercial river users.

Many rafters are not respecting private property in the community.

Some rafters do not respect fishermen's needs and often make too much noise and/or come too close to trot lines.

There is an unwelcome amount of speeding traffic through the community which creates safety concerns and an increased volume of dust in the air. Residents would like to see the road centerline striped and speed limit signs posted.

The community would like the dump area near the top of the access road removed.

Oak Hill Meeting. . . . December 1, 1988

The meeting opened with a presentation of alternatives by the DSC planning teams--including three other DCPs besides Cunard. Most public input was addressed to those other areas. Only two comments were recorded that addressed Cunard specifically:

Maintain traditional access patterns to fishing and hiking areas.

Continue to improve access to the river.

RESULTS OF SOIL SURVEY

United States
Department of
Agriculture

Soil
Conservation
Service

Beckley Area Office
483 Ragland Road
Beckley, WV 25801

December 8, 1988

Mary Riddle, Natural Resource Specialist Eastern Team
National Park Service
Denver Service Center
12795 W. Alameda Parkway
P.O. Box 25287
Denver, Colorado 80225-0287

Dear Mary,

Re: Detailed Soil Survey for Cunard DCP

Enclosed is the soil map on the enlarged USGS quads you sent to me and the soil map unit descriptions.

I visited the site on December 6, 1988. It appears that much of the area has been disturbed by man to build a coal load-out. There are old concrete pillars for the loadout and a concrete coal silo pad which I marked on the soil map. There is a old railroad siding leading to and past the concrete pillars which I marked on the soil map. Much of the natural soil in the loadout area has been disturbed by man for building sites, roads, and railroads.

The extent of the coal refuse area, mapped It, is not very large but is scattered out and difficult to map accurately at the 1"=500' scale. In fact, I had to enlarge the It map unit to show it on the topo map. Much of the coal refuse is the bed of old railroad siding and railroad tracks where coal was spilled. The largest pile of refuse is located between the New River and the old main railroad right of way just south of the steps leading down to the river. There is a large gully near the steps cutting through some of the refuse back toward the road on the railroad grade. The Itmann soil is highly erosive and surface water should be diverted away from this soil especially on steep slopes.

If you have any questions or need more information please contact me.

Sincerely,

Barrie L. Wolf

Barrie L. Wolf
Soil Scientist

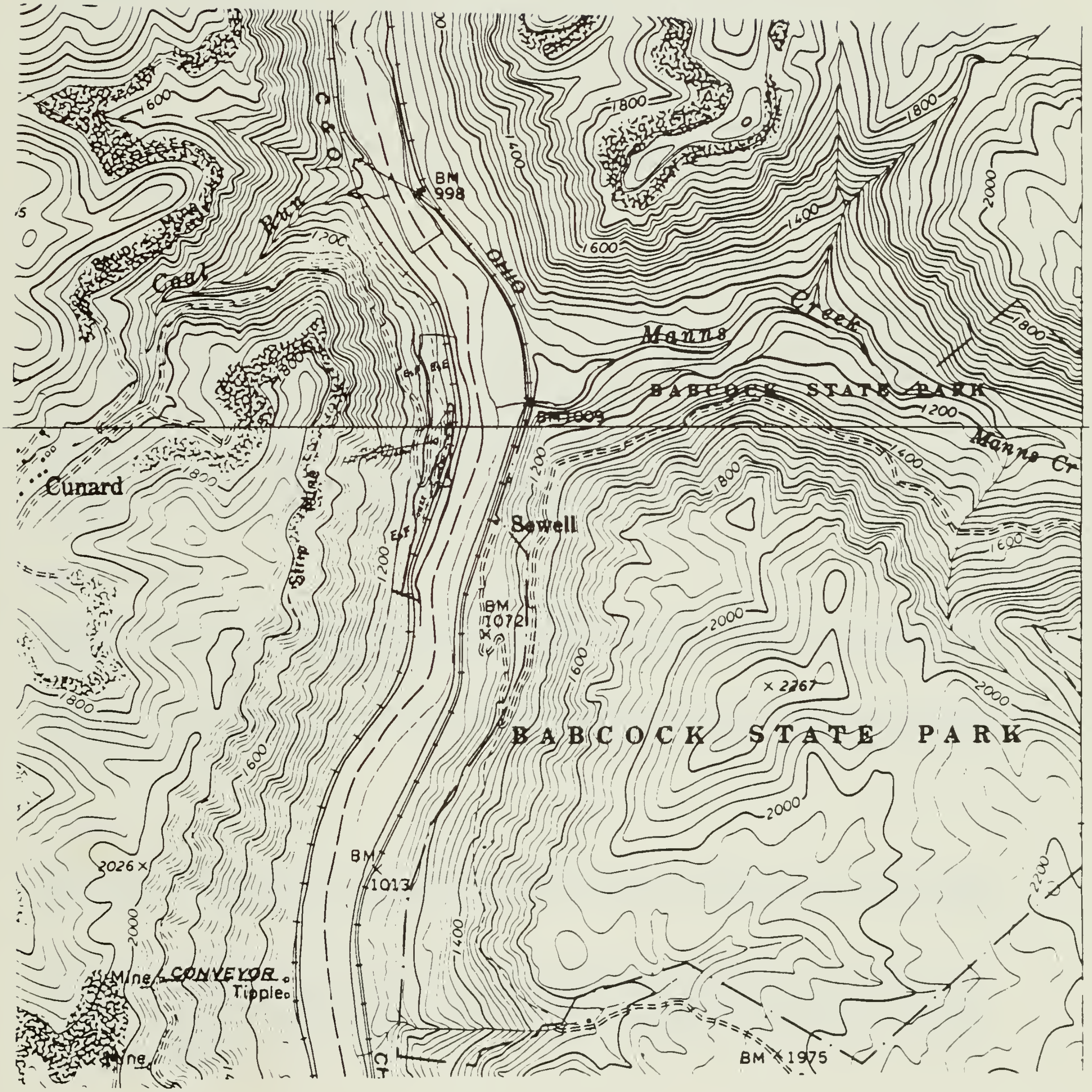
Sol Legend and Map Unit Descriptions for Cunard DCP

EsE - Ernest-Shelocta extremely stony silt loams, 20 to 40 percent slopes. This unit is 45 percent Ernest soils, 30 percent Shelocta soils and 25 percent slopes. The Ernest sols are very deep (over 60" to bedrock) and moderately well drained with a fragipan at 18 to 30 inches. The Shelocta soils are very deep and well drained. One major limitation of these soils is that 15 to 50 percent of the surface is covered with stones and boulders. Some of the larger boulders would need a large dozer to move. Another limitation is the seasonal high water table in the Ernest soil which will seep out of cuts during the fall, winter and spring. The steep slopes of this unit, especially between the railroad grade and the river, will make access to the river difficult. The soil pH's range from 4.5 to 5.5.

EsF - Ernest-Shelocta extremely stony silt loams, 40 to 65 percent slopes. This unit is 40 percent Ernest soils, 35 percent Shelocta soils and 25 percent other soils including rock outcrops and disturbed areas. The major limitations of these soils are the large boulders, very steep slopes and seasonal high water table in the Ernest soil.

It - Itmann extremely channery sandy loam. This soil is very deep and well drained and is formed in waste material from coal mining. The colors are usually black or very dark grey and the pH's at the site ranged from 4.5 to 6.4. The higher pH's were found where the limestone gravel was used in the railroad beds. The slopes in this unit were highly variable 3 percent to 65 percent, depending on position. The major limitation of this soil is that it is highly erosive on slopes. This soil can be difficult to revegetate because of low pH's, the black color and high erosion hazard. The Itmann soil at the site has revegetated to woodland naturally even on the steeper slopes.

The Ernest and Itmann soils are in hydrology soil group C and the Shelocta soil is in hydrology soil group B.


Coal Run
1600
1200
BM
998
OHIO
1800
1600
1400
1800
2000
Manns Creek
1800
BABCOCK STATE PARK
BM 1009
1200
Manns Cr
1600
1800
Cunard
1800
Strip Mine
Sewell
1200
1600
BM
1072
2000
1600
× 2267
2000
BABCOCK STATE PARK
1800
1600
2000
2026 ×
BM
1013
1400
2000
2200
Mine
CONVEYOR
Tipple
Mine
BM × 1975

CONSULTATION AND COORDINATION WITH OTHERS

U.S. Fish and Wildlife Service

West Virginia Department of Natural Resources
  - Division of Wildlife Resources
  - Division of Water Resources
  - Natural Heritage Program
  - Division of Sediment Control
  - Division of Environmental Standards

U.S. Soil Conservation Service

U.S. Army Corps of Engineers

West Virginia State Parks

Environmental Protection Agency

Federal Emergency Management Agency

APPENDIX: DESCRIPTION OF PLANNING UNITS

A planning unit is a section of the park that has both physical and visitor use characteristics that differentiate it from other sections of the park. At New River Gorge National River four such geographic areas/planning units have been designated. Division of the park into units is only for planning purposes. It makes it easier to visualize and comprehend this complex landscape and ensures that decisions about any one site are made in relation to the effects they will have on neighboring sites. Moving from south to north (following the flow of the river), the units are the Upper Gorge unit, the Glade Creek unit, the Middle Gorge unit, and the Lower Gorge unit.

Each of the four planning units has its own unique qualities and significance that differentiate it from the other units. In addition, each unit has been given a management and use emphasis that relates to its uniqueness.

Upper Gorge Unit

Significance. This southernmost unit of the park is characterized by an agricultural landscape and flatwater that is punctuated by two scenic waterfalls and the mountain community of Hinton. The excellent warm-water fishery on this part of the river is some of the best in the state. Unusual plant and animal diversity, including at least five species of plants considered rare in the state, and important river-rock riparian habitat are in the Upper Gorge Unit.

Emphasis. Because the park is crossed by Interstate 64 in this unit, highway travellers will be introduced to the national river in much the same way that the Canyon Rim contact facility serves visitors on US 19 to the north. More casual river and shoreline recreation such as fishing, floating, picnicking, and environmental education will be emphasized.

Glade Creek Unit

Significance. Glade Creek is the largest tract of relatively undeveloped land within the park. The restorative powers of nature are clearly demonstrated in this unit, where evidence of former settlement and logging are barely visible.

Emphasis. This unit will be managed to protect the its wilderness character. Wildland hiking, fishing, and exploration are the featured uses in the unit. Vehicle access will be limited to trailheads along the edges of the unit.

Middle Gorge Unit

Significance. The Middle Gorge unit has the greatest variety of accessible natural and historic features and recreational sites. Access is by road and trail corridors that extend the entire length of the unit on opposite sides of the river.

Emphasis. Site-specific interpretation and more contemplative recreation will be emphasized in this unit. Thurmond and McCreery could serve as principle orientation points at either end of the unit-Thurmond focusing on railroading and transportation stories and McCreery addressing recreation opportunities and natural history themes. Improvements at river access points will upgrade facilities to a higher standard.

Lower Gorge Unit

The significance and emphasis of ths unit are described in the main body of this document.

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New River Gorge National River

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Brian McDonald, West Virginia Department of Natural Resoruces, Natural Heritage Program

March 3, 1849

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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